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=> fil hcap
FILE 'HCAPLUS' ENTERED AT 15:21:58 ON 05 JUN 2007
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FILE COVERS 1907 - 5 Jun 2007  VOL 146 ISS 24
FILE LAST UPDATED: 4 Jun 2007  (20070604/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l54
L1              STR
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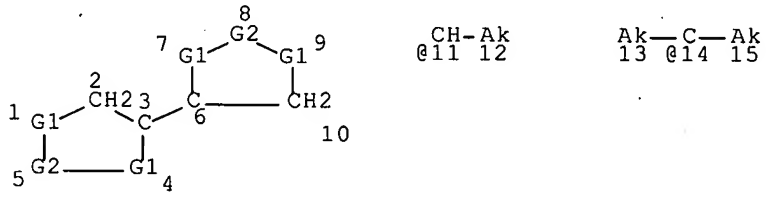


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GGCAT   IS LIN  SAT  AT  13
GGCAT   IS LIN  SAT  AT  15
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
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STEREO ATTRIBUTES: NONE
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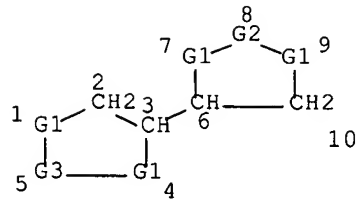

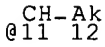

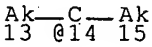

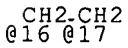

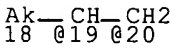

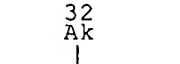

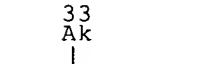

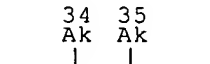

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6-9/26-7 25-9/29-7 30-9
VAR G3=CH2/11/14/16-1 17-4/19-1 20-4/20-1 19-4/22-1 23-4/23-1 22-4/25-1 2
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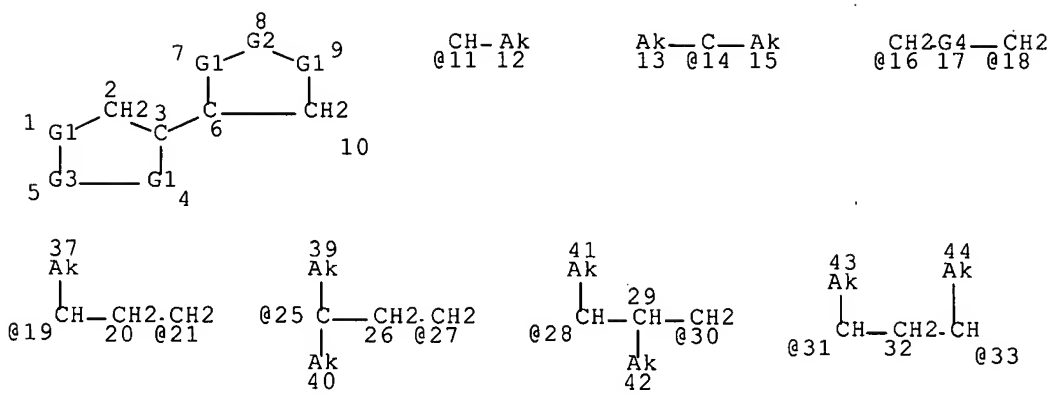
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 35

STEREO ATTRIBUTES: NONE
L4 327 SEA FILE=REGISTRY SUB=L2 SSS FUL L3
L11 16283 SEA FILE=REGISTRY SSS FUL L1
L13 STR



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VAR G2=16-7 18-9/19-7 21-9/21-7 19-9/25-7 27-9/27-7 25-9/28-7 30-9/30-7 2
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REP G3=(1-3) C
VAR G4=CH2/11/14
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DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 12
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 37

STEREO ATTRIBUTES: NONE

L15	34	SEA FILE=REGISTRY SUB=L11 SSS FUL L13
L16	2	SEA FILE=REGISTRY ABB=ON PLU=ON L15 AND IDS/CI
L17	1	SEA FILE=REGISTRY ABB=ON PLU=ON L16 AND C16H30/MF
L18	1	SEA FILE=REGISTRY ABB=ON PLU=ON L17 AND L15
L19	202	SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND NC=1
L20	203	SEA FILE=REGISTRY ABB=ON PLU=ON L18 OR L19
L21		STR

Ak 1

NODE ATTRIBUTES:
CONNECT IS E1 RC AT 1
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 1
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 1

STEREO ATTRIBUTES: NONE
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L25 512 SEA FILE=HCAPLUS ABB=ON PLU=ON L23
L54 422 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND (PY<2003 OR PRY<2003 OR AY<2003)

RESULTS FOR CLAIM 1 (ONLY A SAMPLE DISPLAYED, NONE REFER TO A COSMETIC USE):

=> d l54 ibib ab hitstr 1-3 100-105 200-205 410-422

L54 ANSWER 1 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:723762 HCAPLUS Full-text
DOCUMENT NUMBER: 145:302885
TITLE: High speed liquid crystal composition and liquid crystal display device using the composition
INVENTOR(S): Ban, Byeong Seop; Kim, Bong Hui; Seo, Bong Seong; Yoon, Yong Guk
PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004050505	A	20040616	KR 2002-78357	20021210 <--
PRIORITY APPLN. INFO.:			KR 2002-78357	20021210 <--

AB The present inventions are provided to obtain a composition for motion picture having a high phase transition temperature and a rapid response time by using a nematic liquid crystal compound having a high refractive index and a high dielec. constant The composition comprises a nematic liquid crystal compound represented by the formula [I wherein R is CnH2n+1O, CnH2n+1 or CnH2n-1 (wherein n is an integer of 1-15); n is an integer of 1-3; B is a Ph, cyclohexane, phenyl-cyclohexane or cyclohexane-Ph group, a direct single bond, -CH2CH2-, -COO-, -C=C- or a carbon-carbon triple bond; X is H, F, Cl, Br, NCS or SCN; Y is NCS, SCN or F; and Z is H, F, Cl, Br, NCS or SCN]. Preferably the composition comprises 1-80 wt% of the nematic liquid crystal compound of the formula I; and 20-99 wt% of at least one liquid crystal compound selected from the compds. represented by R2-A1-B1-X1, and the formulas [II, III, and IV, wherein A is a Ph, cyclohexane, phenyl-cyclohexane or cyclohexane-Ph group, a direct single bond, -CH2CH2-, -COO-, -C=C- or a carbon-carbon triple

bond; R2 is CnH2n+1 or CnH2n (wherein n is an integer of 1-15); X is H, F, Cl, Br, or NCS; Y is NCS, SCN or F; and Z is H, F, Cl, Br, or NCS; R2 is CnH2n+1 or CnH2n (wherein n is an integer of 1-15); A1 and B1 are Ph, cyclohexane, or 1,3-dioxane; X1 is F, CF3, OCF3, CH=CF2 or OCH=CF2; and A3, B2 and C are F, CF3, OCF3 or H].

IT ***92263-41-7 517919-71-0 517919-72-1***

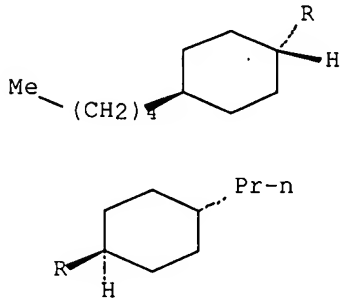
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(high speed liquid crystal composition and liquid crystal display device using composition)

RN 92263-41-7 HCAPLUS

CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

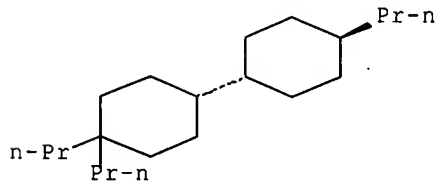
Relative stereochemistry.



RN 517919-71-0 HCAPLUS

CN 1,1'-Bicyclohexyl, 4,4,4'-tripropyl-, trans- (9CI) (CA INDEX NAME)

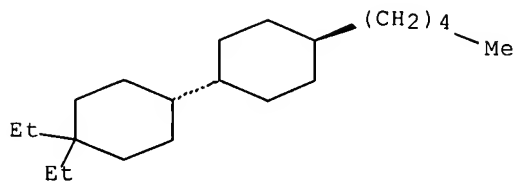
Relative stereochemistry.



RN 517919-72-1 HCAPLUS

CN 1,1'-Bicyclohexyl, 4,4-diethyl-4'-pentyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L54 ANSWER 2 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:723761 HCAPLUS Full-text
DOCUMENT NUMBER: 145:302884
TITLE: Liquid crystal composition for moving picture and liquid crystal display device using the composition
INVENTOR(S): Ban, Byeong Seop; Kim, Bong Hui; Seo, Bong Seong; Yoon, Yong Guk
PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

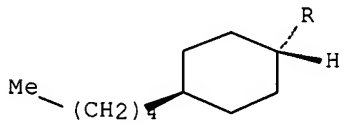
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004050504	A	20040616	KR 2002-78356	20021210 <--
PRIORITY APPLN. INFO.:			KR 2002-78356	20021210 <--

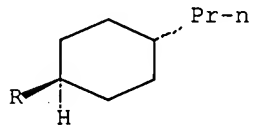
AB The present inventions are provided to obtain a composition for motion picture having a high phase transition temperature and a rapid response time by using a nematic liquid crystal compound having a high refractive index and a high dielec. constant The composition comprises a nematic liquid crystal compound represented by the formula [I wherein R is CnH2n+1O, CnH2n+1 or CnH2n-1 (wherein n is an integer of 1-15); A is a Ph, cyclohexane, or a direct single bond; B is a direct single bond, -CH2CH2-, -COO-, -C≡C- or a carbon-carbon triple bond; X is H, F, or Cl; Y is NCS, SCN or F; and Z1 and Z3 are H, F, or Cl]. Preferably the composition comprises 1-80 wt% of the nematic liquid crystal compound of the formula I; and 20-99 wt% of at least one liquid crystal compound selected from the compds. represented by R2-A1-B1-X1, and the formulas [II and III, wherein R2 is CnH2n+1 or CnH2n (wherein n is an integer of 1-15); A1 and B1 are Ph, cyclohexane, or 1,3-dioxane; X1 is F, CF3, OCF3, CH=CF2 or OCH=CF2; and A3, B2 and C are F, CF3, OCF3 or H].

IT ***92263-41-7 517919-71-0 517919-72-1***
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(liquid crystal composition for moving picture and liquid crystal display device
using the composition)

RN 92263-41-7 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

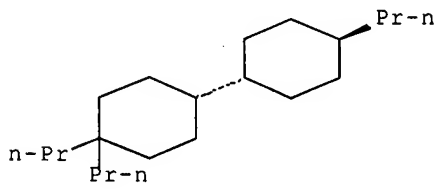
Relative stereochemistry.





RN 517919-71-0 HCAPLUS
CN 1,1'-Bicyclohexyl, 4,4,4'-tripropyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



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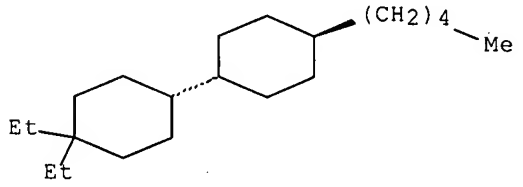
Relative stereochemistry.



L54 ANSWER 3 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:588306 HCAPLUS Full-text
DOCUMENT NUMBER: 141:131412
TITLE: Liquid crystal compositions having low lower critical point of nematic phase and active-matrix displays therewith
INVENTOR(S): Yagi, Hiroo; Kubo, Yasuhiro
PATENT ASSIGNEE(S): Chisso Corp., Japan; Chisso Petrochemical Corporation
SOURCE: Jpn. Kokai Tokkyo Koho, 46 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004204024	A	20040722	JP 2002-374194	20021225 <--
PRIORITY APPLN. INFO.:			JP 2002-374194	20021225 <--

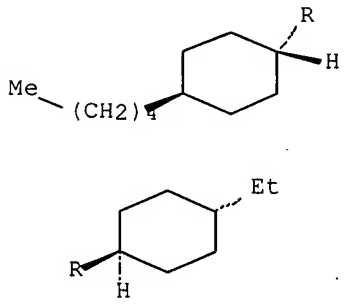
OTHER SOURCE(S): MARPAT 141:131412
AB The compns., showing high voltage retention and sharp elec. response, comprise (A) the 1st components I and/or II and (B) the 2nd components R2A1Z1A2R3, R4A3Z2A4Z3A5R5, and/or III [R1, R2, R4-R6 = alkyl(oxy), alkenyl, alkoxymethyl; R3 = alkyl(oxy), alkenyl, alkoxymethyl, CO2R8 (R8 = alkyl); A1-A5 = 1,4-cyclohexylene, (F-substituted) p-C6H4; A6, A7 = 1,4-cyclohexylene, p-C6H4; Z1 = single bond, (CH2)2, CH:CH, CO2; Z2-Z4 = single bond, (CH2)2; X1 = F, Cl,

CF3, OCF3, OCF2H; Y1-Y5 = H, F; m = 0-2; n = 0, 1], preferably in weight ratio of A/B (5-80):(20-95).

IT ***96624-43-0D***, mixts. containing ***96624-52-1D***, mixts. containing
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(liquid crystal compns. having low lower critical point of nematic phase and
sharp elec. response for active-matrix LCD)

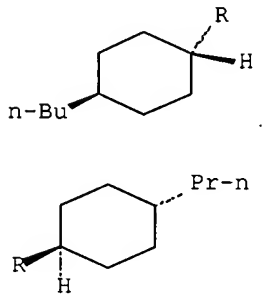
RN 96624-43-0 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-ethyl-4'-pentyl-, (trans,trans)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.



L54 ANSWER 100 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:769308 HCAPLUS Full-text
DOCUMENT NUMBER: 135:325329
TITLE: Polyamic acids, their solutions, and liquid-crystal displays using them
INVENTOR(S): Tanioka, Satoshi; Murata, Shizuo
PATENT ASSIGNEE(S): Chisso Corp., Japan; Chisso Sekiyu Kagaku K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001294663	A	20011023	JP 2000-111475	20000413 <--
TW 242022	B	20051021	TW 2001-90108799	20010412 <--

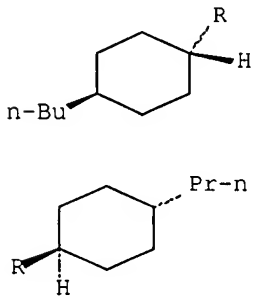
PRIORITY APPLN. INFO.: JP 2000-111475 A 20000413 <--
OTHER SOURCE(S): MARPAT 135:325329

AB The polyamic acids are manufactured by polymerization of (A) tetracarboxylic dianhydrides and (B) diamines I (R1 = H, Me; a, b, c = 1, 2; n = 0-2). The solns. contain 0.1-40 weight% of the polyamic acids. Liquid-crystal displays obtained from the solns. and liquid-crystal materials show pretilt angle 2-3° and no nonuniformity in washing.

IT ***96624-52-1D***, mixts. containing
RL: DEV (Device component use); USES (Uses)
(polyamic acids prepared from specific diamines for LCD having 2-3° pretilt angle)

RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.



L54 ANSWER 101 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:762266 HCAPLUS Full-text
DOCUMENT NUMBER: 135:311056
TITLE: Nematic liquid crystalline medium with low threshold voltage for use in liquid crystal display
INVENTOR(S): Heckmeier, Michael; Pauluth, Detlef
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10118734	A1	20011018	DE 2001-10118734	20010417 <--
TW 588106	B	20040521	TW 2001-90106900	20010323 <--
WO 2001079379	A1	20011025	WO 2001-EP4337	20010417 <--
W: JP, KR, US				
JP 2003533557	T	20031111	JP 2001-577363	20010417 <--

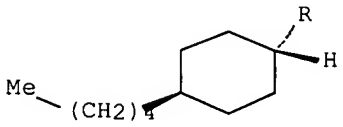
US 2003197152 A1 20031023 US 2003-257635 20030422 <--
US 7033651 B2 20060425
PRIORITY APPLN. INFO.: DE 2000-10018957 A1 20000417 <--
WO 2001-EP4337 W 20010417 <--
OTHER SOURCE(S): MARPAT 135:311056

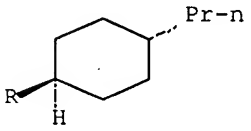
AB The title nematic liquid crystalline medium contains a mixture comprised of at least two compds. represented by a general formula R1-Am-Bn-Z1-C-Z2-D-R2 [R1 = H, C1-15-alkyl, alkenyl; A, B, C, D = 1,4-trans-cyclohexylidene, (F-substituted) 1,4-phenylene, etc.; Z1, Z2 = single bond, -CH2O-, -OCH2-, -CH2CH2-, -CH:CH-, -C.tplbond.C-, -CF2CF2-, -CF2O-, -OCF2-, -COO-; R2 = H, C1-15-alkyl, alkenyl, F, CF3, OCF3, OCHF2, OCH2CF2H; m, n = 0, 1], wherein 30-90 % component of the mixture shows $\Delta\varepsilon \geq 9$ (high polar), 0-30 % component of the mixture shows $1 < \Delta\varepsilon < 9$ (polar), and 10-40 % component of the mixture shows $-1 \leq \Delta\varepsilon$.ltoreq .1 (neutral). The liquid crystalline medium shows greater pos. dielec. anisotropy, wider nematic phase, relatively low birefringence, etc.

IT ***92263-41-7 96624-52-1***
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(in nematic liquid crystalline medium with low threshold voltage for use in liquid crystal display)

RN 92263-41-7 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

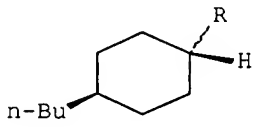
Relative stereochemistry.

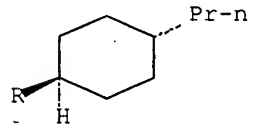




RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





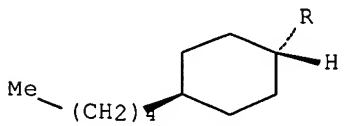
L54 ANSWER 102 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:760068 HCAPLUS Full-text
DOCUMENT NUMBER: 135:296297
TITLE: Liquid crystal mixture with negative dielectric anisotropy for liquid crystal display
INVENTOR(S): Klasen, Melanie; Weller, Clarissa; Tarumi, Kazuaki; Bremer, Matthias
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

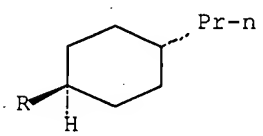
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1146104	A2	20011017	EP 2001-107879	20010410 <--
EP 1146104	A3	20020130		
EP 1146104	B1	20040616		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 10112955	A1	20011122	DE 2001-10112955	20010317 <--
TW 247793	B	20060121	TW 2001-90108388	20010409 <--
US 2002014613	A1	20020207	US 2001-833743	20010413 <--
US 6764722	B2	20040720		
JP 2001354967	A	20011225	JP 2001-116758	20010416 <--
PRIORITY APPLN. INFO.:			DE 2000-10018899 A	20000414 <--
OTHER SOURCE(S):	MARPAT 135:296297			

AB The invention relates to a liquid crystal mixture based on a mixture of polar compds. with neg. dielec. anisotropy, wherein the liquid crystal mixture contains at least one compound represented by I (R11, R12 = C≤15-alkyl, alkenyl; Z = -C2H4-, -CH:CH-, -CF2O-, -OCCF2-, single bond) and at least one compound represented by II (R21 = C≤15-alkyl, alkenyl; Alkenyl = linear C2-6-alkenyl). The liquid crystal mixture is especially suitable for ECB (elec. controlled birefringence) and IPS (in-plane switching) type liquid crystal displays.

IT ***92263-41-7***
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid crystal mixture with neg. dielec. anisotropy for liquid crystal display)
RN 92263-41-7 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





L54 ANSWER 103 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:747073 HCAPLUS Full-text
DOCUMENT NUMBER: 135:296286
TITLE: IPS (In-Plane-Switching) type electrooptical liquid crystal display with reorientation layer
INVENTOR(S): Heckmeier, Michael; Bremer, Matthias; Goetz, Achim; Schuler, Brigitte
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: Ger. Offen., 36 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

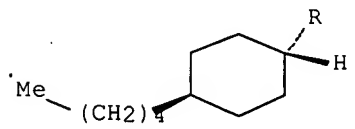
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10111142	A1	20011011	DE 2001-10111142	20010308 <--
JP 2002012869	A	20020115	JP 2001-108671	20010406 <--
US 2002031619	A1	20020314	US 2001-827342	20010406 <--
US 6582782	B2	20030624		

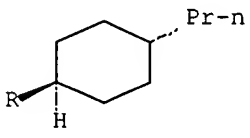
PRIORITY APPLN. INFO.: DE 2000-10017385 A1 20000407 <--
OTHER SOURCE(S): MARPAT 135:296286

AB The invention relates to a liquid crystal display which has a reorientation layer to reorient liquid crystal mixts. having pos. dielec. anisotropy, wherein the liquid crystal mixture includes at least one mesogen compound represented by a general formula I (R1 = C1-7-alkyl, alkoxy, C2-7-alkenyl, alkenyloxy, alkoxyalkyl; L = H, F). The liquid crystal mixture suitable for the IPS (in-plane-switching) liquid crystal display shows relatively high clear point, and low rotational viscosity.

IT ***92263-41-7***
RL: TEM (Technical or engineered material use); USES (Uses)
(in nematic liquid crystal mixture suitable for IPS (In-Plane-Switching) type electrooptical liquid crystal display with reorientation layer)
RN 92263-41-7 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





L54 ANSWER 104 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:747072 HCAPLUS Full-text

DOCUMENT NUMBER: 135:296285
TITLE: IPS (In-Plane-Switching) type electrooptical liquid crystal display with reorientation layer
INVENTOR(S): Heckmeier, Michael; Reuter, Marcus; Bremer, Matthias; Poetsch, Eike
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: Ger. Offen., 26 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

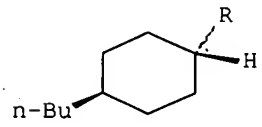
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10111139	A1	20011011	DE 2001-10111139	20010308 <--
US 2002043645	A1	20020418	US 2001-819799	20010329 <--
US 6749907	B2	20040615		
TW 554034	B	20030921	TW 2001-90107884	20010402 <--
JP 2002012866	A	20020115	JP 2001-108549	20010406 <--
PRIORITY APPLN. INFO.:			DE 2000-10017384 A1	20000407 <--

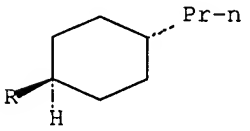
OTHER SOURCE(S): MARPAT 135:296285

AB The invention relates to a liquid crystal display which has a reorientation layer to reorient liquid crystal mixts. having pos. dielec. anisotropy, wherein the liquid crystal mixture includes at least one compound represented by a general formula I (R1 = C1-7-alkyl, alkoxy, C2-7-alkenyl, alkenyloxy, alkoxyalkyl; Y11, Y12 = H, F). The liquid crystal mixture suitable for the IPS (in-plane-switching) liquid crystal display shows relatively high clear point, and low rotational viscosity.

IT ***96624-52-1***
RL: TEM (Technical or engineered material use); USES (Uses)
(in nematic liquid crystal mixture suitable for IPS (In-Plane-Switching) type electrooptical liquid crystal display with reorientation layer)
RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





L54 ANSWER 105 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:703524 HCAPLUS Full-text
DOCUMENT NUMBER: 135:264650
TITLE: Nematic liquid-crystal compositions and active matrix-type displays using them
INVENTOR(S): Yanai, Motoki; Kubo, Yasuhiro; Nakagawa, Etsuo

PATENT ASSIGNEE(S): Chisso Corp., Japan; Chisso Sekiyu Kagaku K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001262145	A	20010926	JP 2000-72064	20000315 <--
US 2001038091	A1	20011108	US 2001-808019	20010315 <--
US 6395353	B2	20020528		

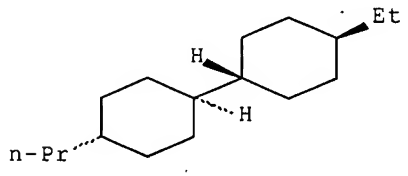
PRIORITY APPLN. INFO.: JP 2000-72064 A 20000315 <--
OTHER SOURCE(S): MARPAT 135:264650

AB The compns. contain (A) ≥1 of I, (B) ≥1 of II, and (C) ≥1 compds. selected from R1-1,4-C6H10(CO2)pA4(CO2)qR3 and R1-1,4-C6H10A5-1,4-C6H4(1,4-C6H10)sR3 [R1 = C1-10 alkyl, C2-10 alkenyl; R2 = C1-10 alkyl, alkoxy, C2-10 alkenyl; Z1, Z2 = CH2SiH2, single bond, CH2CH2; A1, A5 = trans-1,4-cyclohexylene, (fluorinated) 1,4-phenylene; Z3, Z4 = single bond, CH2CH2, CF2O, OCF2; A2, A3 = tetrahydropyran-2,5-diyl, trans-1,4-cyclohexylene, cyclohexa-1-ene-1,4-diyl, (fluorinated) 1,4-phenylene; A4 = 1,4-phenylene, trans-1,4-cyclohexylene; m, n, p, q, s = 0, 1]. The compns. show desired anisotropy of refractive index, high neg. anisotropy of dielec. constant, high voltage retention, and low viscosity. Displays using the compns. show large viewing angle.

IT ***96624-41-8D***, mixts. containing ***96624-43-0D***, mixts. containing ***96624-52-1D***, mixts. containing
RL: DEV (Device component use); USES (Uses)
(nematic liquid-crystal compns. with low viscosity and high neg. anisotropy of dielec. constant for displays)

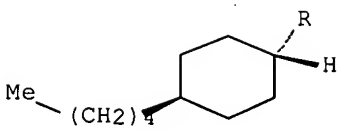
RN 96624-41-8 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-ethyl-4'-propyl-, (trans,trans)- (9CI) (CA INDEX NAME)

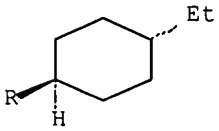
Relative stereochemistry.



RN 96624-43-0 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-ethyl-4'-pentyl-, (trans,trans)- (9CI) (CA INDEX NAME)

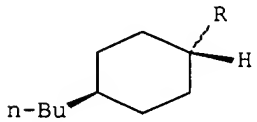
Relative stereochemistry.

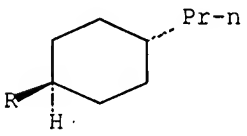




RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





L54 ANSWER 200 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:388755 HCAPLUS Full-text
DOCUMENT NUMBER: 129:47743
TITLE: Liquid crystal medium and an electrooptical display using it
INVENTOR(S): Tarumi, Kazuaki; Schuler, Brigitte
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Ger. Offen., 18 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19650635	A1	19980610	DE 1996-19650635	19961206 <--
DE 19650635	B4	20051110		
JP 11043673	A	19990216	JP 1997-350244	19971205 <--
US 5968412	A	19991019	US 1997-986335	19971205 <--
PRIORITY APPLN. INFO.:			DE 1996-19650635 A	19961206 <--

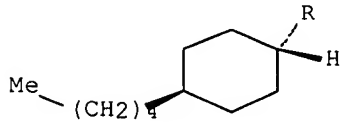
OTHER SOURCE(S): MARPAT 129:47743
AB A liquid-crystal medium based on a mixture of polar compds. having pos. dielec. anisotropy contains ≥1 compds. of the formula I, where R = H or C1-15

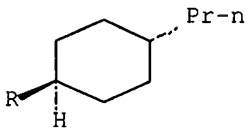
alkyl or alkenyl, unsubstituted, singly substituted with CN or CF3, or at least singly substituted with halogen, in which ≥1 CH2 groups may be replaced by O, S, cyclobutan-1,3-diyl, CO, COO, OCO, or OCOO in such a way that O atoms are not directly bonded to each other.

IT ***92263-41-7D***, mixture containing ***96624-52-1D***, mixture containing
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(liquid-crystal for electrooptical displays)

RN 92263-41-7 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

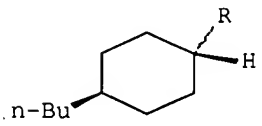
Relative stereochemistry.

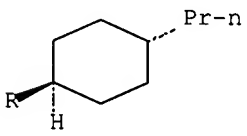




RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





L54 ANSWER 201 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:388754 HCAPLUS Full-text
DOCUMENT NUMBER: 129:60629
TITLE: IPO (in-plane-switching) electrooptical liquid crystal display
INVENTOR(S): Tarumi, Kazuaki; Beyer, Andreas; Poetsch, Eike
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Ger. Offen., 14 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19650634	A1	19980610	DE 1996-19650634	19961206 <--
DE 19650634	B4	20060330		
JP 10168454	A	19980623	JP 1997-350245	19971205 <--
US 5919396	A	19990706	US 1997-986334	19971205 <--
US 6080452	A	20000627	US 1999-318576	19990527 <--

PRIORITY APPLN. INFO.: DE 1996-19650634 A 19961206 <--
US 1997-986334 A3 19971205 <--

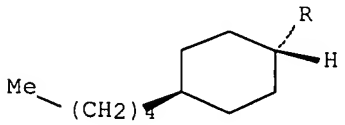
OTHER SOURCE(S): MARPAT 129:60629

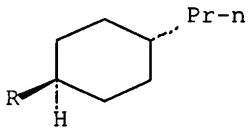
AB In the title display comprising a liquid crystal reorientation layer and liquid crystals showing pos. dielec. anisotropy, the liquid crystals include a mesogen compound represented by a general formula I (R1 = C1-15-alkyl, alkenyl, in which 1 or 2 non-adjacent CH2 can be substituted with O, S, CO, COO, OCO, OCOO). The display shows improved fast switching property.

IT ***92263-41-7 96624-52-1***
RL: DEV (Device component use); USES (Uses)
(nematic liquid crystal mixture in IPO (in-plane-switching) electrooptical liquid crystal display)

RN 92263-41-7 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

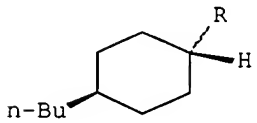
Relative stereochemistry.

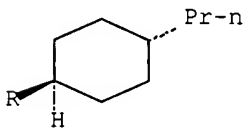




RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





L54 ANSWER 202 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:388493 HCAPLUS Full-text
DOCUMENT NUMBER: 129:60627
TITLE: Conjugated nitrile derivatives, liquid crystal compounds, and liquid crystal display elements
INVENTOR(S): Fujita, Atsuko; Tamura, Norio; Matsui, Shuichi; Miyazawa, Kazutoshi; Takeuchi, Hiroyuki; Kubo, Yasuhiro; Takeshita, Husayuki; Nakagawa, Etsuo
PATENT ASSIGNEE(S): Chisso Corporation, Japan
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9823583	A1	19980604	WO 1997-JP4328		19971127 <--
W: JP, US					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
EP 947501	A1	19991006	EP 1997-913456		19971127 <--
R: DE					
US 6149838	A	20001121	US 1999-319025		19990528 <--
PRIORITY APPLN. INFO.:			JP 1996-332771	A	19961128 <--
			JP 1996-346636	A	19961210 <--
			WO 1997-JP4328	W	19971127 <--

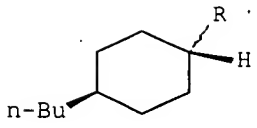
OTHER SOURCE(S): MARPAT 129:60627

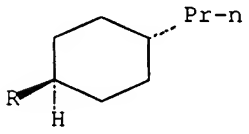
AB Novel liquid crystal compds. exhibiting wide liquid-crystal temperature ranges, a large anisotropy of permittivity, and a large optical anisotropy; liquid crystal compns. containing them; and liquid crystal display elements made by using the compns. The compds. are cyclohexane derivs. of general formula R(A1B1)m(A2B2)n(A3B3)pA4GCN [R = C1-C10 alkyl, one or more methylene groups of which may be replaced by oxygen or vinylene (-CH=CH-), with the proviso that no two of the methylene groups adjacent to each other are simultaneously replaced thereby; A1, A2, A3, A4 = 1,4-cyclohexylene, 1,3-pyrimidine-2,5-diyl, 1,3-dioxane-2,5-diyl, optionally fluorinated 1,4-phenylene; B1, B2, B3 = covalent bond, 1,2-ethylene, 1,2-ethenylene, 1,2-ethynylene, carbonyloxy, methyleneoxy, 1,4-butylene; m, n, p = 0, 1; G = CH2C.tplbond.CCH:CHCH2, CH2CH:CHC.tplbond.CCH2, CH2C.tplbond.CC.tplbond.CCH2].

IT ***96624-52-1 197012-71-8***
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid crystal mixture including conjugated nitrile derivs.)

RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

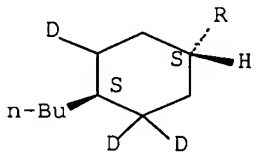
Relative stereochemistry.

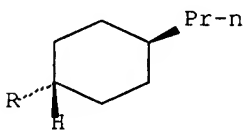




RN 197012-71-8 HCAPLUS
CN 1,1'-Bicyclohexyl-3,3,5-d3, 4-butyl-4'-propyl-, (1R,1'α,4R,4'β)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.





REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L54 ANSWER 203 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:388484 HCAPLUS Full-text
DOCUMENT NUMBER: 129:88077
TITLE: Fluorine-substituted benzene derivatives, liquid-crystal composition, and liquid-crystal display element
INVENTOR(S): Kondo, Tomoyuki; Miyazawa, Kazutoshi; Takeuchi, Hiroyuki; Matsui, Shuichi; Hisatsune, Yasusuke; Takeshita, Fusayuki; Nakagawa, Etsuo
PATENT ASSIGNEE(S): Chisso Corporation, Japan
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9823564	A1	19980604	WO 1997-JP4331	19971127 <--

W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9851917	A	19980622	AU 1998-51917		19971127 <--
EP 949231	A1	19991013	EP 1997-946802		19971127 <--
EP 949231	B1	20070502			
R: DE, FR, GB					
TW 482819	B	20020411	TW 1997-86117941		19971128 <--
US 6210603	B1	20010403	US 1999-308983		19990528 <--
PRIORITY APPLN. INFO.:			JP 1996-332768	A	19961128 <--
			WO 1997-JP4331	W	19971127 <--

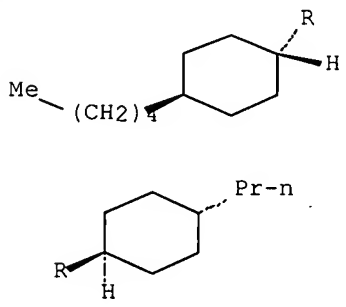
OTHER SOURCE(S): MARPAT 129:88077

AB Liquid-crystalline compds. have an extremely high voltage retention, an extremely small temperature dependence of the retention, a low threshold voltage, and a large value of Δn. A liquid-crystal composition containing any of the liquid-crystal compds. A liquid-crystal display element containing the liquid-crystal composition The compds. are represented by general I (R = C1-20 alkyl; Y1 to Y16 = H, F; X = halogeno or C1-20 alkyl; and Z1-3 = -(CH2)2-, -(CH2)4-, -CH2O-, -OCH2-, -(CH2)3O-, -O(CH2)3- or a single bond).

IT ***92263-41-7 96624-52-1***
RL: DEV (Device component use); USES (Uses)
(fluorine-substituted benzene derivs. for liquid-crystal composition and liquid-crystal display element)

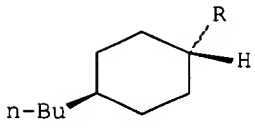
RN 92263-41-7 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

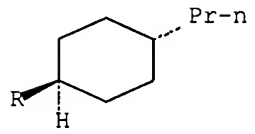
Relative stereochemistry.



RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L54 ANSWER 204 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:388483 HCAPLUS Full-text
DOCUMENT NUMBER: 129:60626
TITLE: Liquid crystal compounds exhibiting negative anisotropy of permittivity, liquid crystal compositions, and liquid crystal displays
INVENTOR(S): Kondo, Tomoyuki; Matsui, Shuichi; Miyazawa, Kazutoshi; Takeuchi, Hiroyuki; Takeshita, Fusayuki; Nakagawa, Etsuo
PATENT ASSIGNEE(S): Chisso Corporation, Japan
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9823563	A1	19980604	WO 1997-JP4330		19971127 <--
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9850673	A	19980622	AU 1998-50673		19971127 <--
EP 945418	A1	19990929	EP 1997-913458		19971127 <--
EP 945418	B1	20040407			
R: DE, FR, GB					
TW 457289	B	20011001	TW 1997-86117946		19971128 <--
US 6210761	B1	20010403	US 1999-319008		19990528 <--
PRIORITY APPLN. INFO.:			JP 1996-332767	A	19961128 <--
			WO 1997-JP4330	W	19971127 <--

OTHER SOURCE(S): MARPAT 129:60626
AB The liquid crystal compds. are represented by I (Ra,b = C1-20 alkyl; Y1-6 = H, F; Z1,2 = -(CH2)2-, -(CH2)4, -CH2O-, -(CH2)3O-, single bond). The liquid crystal compds. exhibit not only a neg. anisotropy of permittivity but also extremely high voltage retention and low threshold voltages. The liquid crystal compds. reduced in the temperature dependence of these properties and difficultly in exhibiting a smectic phase, and are excellent in compatibility

with other liquid crystal materials. The liquid crystal compns. for the liquid crystal displays were also claimed.

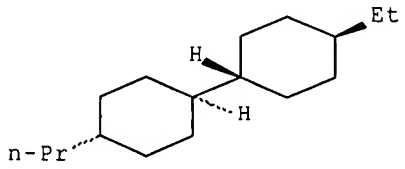
IT *96624-41-8 96624-52-1*

RL: TEM (Technical or engineered material use); USES (Uses)
(liquid crystal compds. exhibiting neg. anisotropy of permittivity for liquid crystal compns. and liquid crystal displays)

RN 96624-41-8 HCAPLUS

CN 1,1'-Bicyclohexyl, 4-ethyl-4'-propyl-, (trans,trans)- (9CI) (CA INDEX NAME)

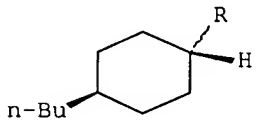
Relative stereochemistry.

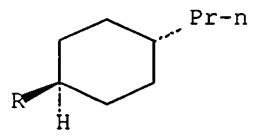


RN 96624-52-1 HCAPLUS

CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.





REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L54 ANSWER 205 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:388482 HCAPLUS Full-text

DOCUMENT NUMBER: 129:60625

TITLE: 3,3'-Difluorobiphenyl derivatives, liquid crystal compositions, and liquid crystal display elements

INVENTOR(S): Kondo, Tomoyuki; Matsui, Shuichi; Miyazawa, Kazutoshi; Takeuchi, Hiroyuki; Takeshita, Fusayuki; Nakagawa, Etsuo

PATENT ASSIGNEE(S): Chisso Corporation, Japan

SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9823562	A1	19980604	WO 1997-JP4265	19971121 <--
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9850667	A	19980622	AU 1998-50667	19971121 <--
EP 959061	A1	19991124	EP 1997-913430	19971121 <--
R: DE				
TW 486513	B	20020511	TW 1997-86117607	19971124 <--
US 6197217	B1	20010306	US 1999-308775	19990525 <--
PRIORITY APPLN. INFO.:			JP 1996-329158 A	19961125 <--
			WO 1997-JP4265 W	19971121 <--

OTHER SOURCE(S): MARPAT 129:60625

AB Liquid crystal compds. which exhibit not only neg. anisotropy of permittivity but also extremely high voltage retention and low threshold voltages, are extremely reduced in the temperature dependence of these properties, difficultly exhibit a smectic phase, and are excellent in compatibility with other liquid crystal materials; liquid crystal compns. containing them; and liquid crystal display elements made by using the compns. The compds. are specific 3,3'-difluorobiphenyl derivs. represented by general formula I.

IT ***92263-41-7P 96624-41-8P 96624-52-1P 197012-71-8P***

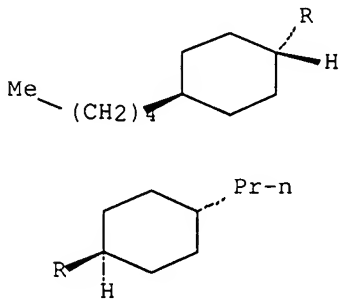
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(3,3'-difluorobiphenyl derivs. for liquid crystal compns.)

RN 92263-41-7 HCAPLUS

CN 1,1'-Bicyclohexyl, 4-pentyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

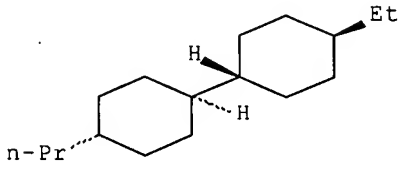
Relative stereochemistry.



RN 96624-41-8 HCAPLUS

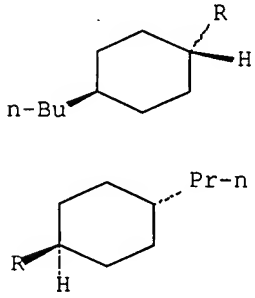
CN 1,1'-Bicyclohexyl, 4-ethyl-4'-propyl-, (trans,trans)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



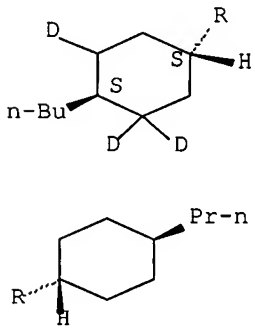
RN 96624-52-1 HCAPLUS
CN 1,1'-Bicyclohexyl, 4-butyl-4'-propyl-, (trans,trans)- (CA INDEX NAME)

Relative stereochemistry.



RN 197012-71-8 HCAPLUS
CN 1,1'-Bicyclohexyl-3,3,5-d3, 4-butyl-4'-propyl-, (1R,1'α,4R,4'β)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

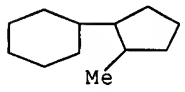
L54 ANSWER 410 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1947:7904 HCAPLUS Full-text
DOCUMENT NUMBER: 41:7904
ORIGINAL REFERENCE NO.: 41:1623e-f
TITLE: Isomerization of bicyclohexyl

AUTHOR(S): Orchin, Milton; Feldman, Julian
CORPORATE SOURCE: U.S. Bur. Mines, Pittsburgh, PA
SOURCE: Journal of the American Chemical Society (*1946*), 68, 2737-8
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

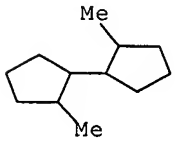
AB Treatment of 3887 g. bicyclohexyl 50 hrs. with 1100 g. AlCl3 at 100° (the same product can be obtained in 5 hrs. if a stream of dry HCl is passed into the mixture) gives 3860 cc. crude isomerized product; fractional distillation yielded 885 g. (23%) b750 215.5-15.7°, nD20 1.4629, d420 0.8512, and 8% b750 222-5°, nD20 1.4701, d420 0.8644. The 1st fraction yielded 96 g. of a compound assumed to be 2,2'-dimethylbicyclopentyl, b760 216.9°, m. 45.5-5.7°, nD50 1.4500, nD60 1.4463. The 2nd fraction is 1-cyclohexyl-2- methylcyclopentane, b760 224.4°, nD20 1.4705, d420 0.8683 (b.ps. and m.p. corrected).

IT ***5405-90-3P***, Cyclohexane, 2-methylcyclopentyl- ***66778-23-2P***, Bicyclopentyl, 2,2'-dimethyl-
RL: PREP (Preparation)
(preparation of)

RN 5405-90-3 HCAPLUS
CN Cyclohexane, (2-methylcyclopentyl)- (8CI, 9CI) (CA INDEX NAME)



RN 66778-23-2 HCAPLUS
CN 1,1'-Bicyclopentyl, 2,2'-dimethyl- (9CI) (CA INDEX NAME)



L54 ANSWER 411 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1944:16118 HCAPLUS Full-text
DOCUMENT NUMBER: 38:16118
ORIGINAL REFERENCE NO.: 38:2310h-i,2311a-c
TITLE: The synthesis and properties of hydrocarbons of high molecular weight. III
AUTHOR(S): Schiessler, R. W.; Clarke, D. G.; Rowland, C. S.; Sloatman, W. S.; Herr, C. H.
SOURCE: Proc. Am. Petroleum Inst. (*1943*), 24;III, 49-74
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

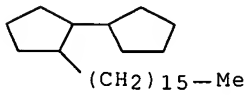
AB Correction. The 24 new hydrocarbons mentioned in C. A. 38, 545.6, 1465.8, are: 1-cyclopentyl-2-hexadecylcyclopentane, m. 18.7°, b0.5 194.5°, b1 208°; 1-hexadecylindan, m. 33.1°, b0.5 191.5°, b1 206.5°; 11-

(cyclopentylmethyl)heneicosane, m. -21.5°, b0.5 190.5°, b1 204°; 1,5-diphenyl-3- phenethylpentane, pour pt. -32°, b0.5 195°, b1 209.5°; 1,5-dicyclohexyl-3-(2-cyclohexylethyl)pentane, m. 41.2°, b0.5 185°, b1 199.5°; 11-(cyclohexylmethyl)heneicosane, m. -4.2°, b0.5 197.5°, b1 212°; 1-phenyleicosane, m. 42.3°, b0.5 197.5°, b1 212°; 1-cyclohexyleicosane, m. 47.9°, b0.5 198°, b1 212°; 2-phenyleicosane, m. 29°, b0.5 190°, b1 204.5°; 2-cyclohexyleicosane, m. 13.1°, b0.5 194°, b1 207°; 4-phenyleicosane, m. 31.4°, b0.5 184.5°, b1 199°; 4-cyclohexyleicosane, m. 16°, b0.5 188.5°, b1 201.5°; hexacosane, m. 56.2°, b0.5 191.5°, b1 205°; 11-decyltetracosane, m. 10.8°, b0.5 236°, b1 250°; 1-hexadecylhexahydroindan, m. 36.4°, b0.5 188.5°, b1 203.5°; 3-ethyltetracosane, m. 30.1°, b0.5 187.5°, b1 202°; 9-(3-cyclopentylpropyl)heptadecane, m. -20.6°, b0.5 174.5°, b1 188°; 1-cyclopentyl-4-(3- cyclopentylpropyl)dodecane, m. (approx.) -40°, b0.5 179°, b1 193°; 1,7-dicyclopentyl-4-(3-cyclopentylpropyl)-3-heptene, pour pt. -62°, b0.5 182°, b1 195.5°; 1,7-dicyclopentyl-4-(3- cyclopentylpropyl)heptane, m. -23.7°, b0.5 184°, b1 198°; 1,5-dicyclohexyl-3-(2-cyclohexylethyl)-2-pentene, pour pt. -29°, b0.5 183°, b1 197°; 1,1-di-p-tolyldodecane, pour pt. -57°, b0.5 191.5°, b1 205°; 1-cyclopentylheneicosane, m. 45.2°, b0.5 196.5°, b1 210.5°; 1,5-diphenyl-3-phenethyl-2-pentene, pour pt. -32° b0.5 195.5°, b1 210.5°.

IT ***55334-11-7P***, Bicyclopentyl, 2-hexadecyl-
RL: PREP (Preparation)
(preparation of)

RN 55334-11-7 HCAPLUS

CN 1,1'-Bicyclopentyl, 2-hexadecyl- (9CI) (CA INDEX NAME)



L54 ANSWER 412 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1944:16117 HCAPLUS Full-text

DOCUMENT NUMBER: 38:16117

ORIGINAL REFERENCE NO.: 38:2310h-i,2311a-c

TITLE: The synthesis and properties of hydrocarbons of high molecular weight. III

AUTHOR(S): Schiessler, R. W.; Clarke, D. G.; Rowland, C. S.; Sloatman, W. S.; Herr, C. H.

SOURCE: Petroleum Refiner (***1943***), 22, 390-409
CODEN: PEREAK; ISSN: 0096-6517

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

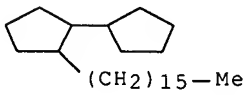
AB Correction. The 24 new hydrocarbons mentioned in C. A. 38, 545.6, 1465.8, are: 1-cyclopentyl-2-hexadecylcyclopentane, m. 18.7°, b0.5 194.5°, b1 208°; 1-hexadecylindan, m. 33.1°, b0.5 191.5°, b1 206.5°; 11-(cyclopentylmethyl)heneicosane, m. -21.5°, b0.5 190.5°, b1 204°; 1,5-diphenyl-3- phenethylpentane, pour pt. -32°, b0.5 195°, b1 209.5°; 1,5-dicyclohexyl-3-(2-cyclohexylethyl)pentane, m. 41.2°, b0.5 185°, b1 199.5°; 11-(cyclohexylmethyl)heneicosane, m. -4.2°, b0.5 197.5°, b1 212°; 1-phenyleicosane, m. 42.3°, b0.5 197.5°, b1 212°; 1-cyclohexyleicosane, m. 47.9°, b0.5 198°, b1 212°; 2-phenyleicosane, m. 29°, b0.5 190°, b1 204.5°; 2-cyclohexyleicosane, m. 13.1°, b0.5 194°, b1 207°; 4-phenyleicosane, m. 31.4°, b0.5 184.5°, b1 199°; 4-cyclohexyleicosane, m. 16°, b0.5 188.5°, b1 201.5°; hexacosane, m. 56.2°, b0.5 191.5°, b1 205°; 11-decyltetracosane, m.

10.8°, b0.5 236°, b1 250°; 1-hexadecylhexahydroindan, m. 36.4°, b0.5 188.5°, b1 203.5°; 3-ethyltetracosane, m. 30.1°, b0.5 187.5°, b1 202°; 9-(3-cyclopentylpropyl)heptadecane, m. -20.6°, b0.5 174.5°, b1 188°; 1-cyclopentyl-4-(3- cyclopentylpropyl)dodecane, m. (approx.) -40°, b0.5 179°, b1 193°; 1,7-dicyclopentyl-4-(3-cyclopentylpropyl)-3-heptene, pour pt. -62°, b0.5 182°, b1 195.5°; 1,7-dicyclopentyl-4-(3- cyclopentylpropyl)heptane, m. -23.7°, b0.5 184°, b1 198°; 1,5-dicyclohexyl-3-(2-cyclohexylethyl)-2-pentene, pour pt. -29°, b0.5 183°, b1 197°; 1,1-di-p-tolyldodecane, pour pt. -57°, b0.5 191.5°, b1 205°; 1-cyclopentylheneicosane, m. 45.2°, b0.5 196.5°, b1 210.5°; 1,5-diphenyl-3-phenethyl-2-pentene, pour pt. -32° b0.5 195.5°, b1 210.5°.

IT ***55334-11-7P***, Bicyclopentyl, 2-hexadecyl-
RL: PREP (Preparation)
(preparation of)

RN 55334-11-7 HCAPLUS

CN 1,1'-Bicyclopentyl, 2-hexadecyl- (9CI) (CA INDEX NAME)



L54 ANSWER 413 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1944:13899 HCAPLUS Full-text

DOCUMENT NUMBER: 38:13899

ORIGINAL REFERENCE NO.: 38:2017a-c

TITLE: Factors determining the course and mechanisms of Grignard reactions. XII. Effect of CoCl2 on the reaction of MeMgBr with alicyclic chlorides

AUTHOR(S): Kharasch, M. S.; Engelmann, Frances; Urry, W. H.

SOURCE: Journal of the American Chemical Society (***1944***), 66, 365-7
CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

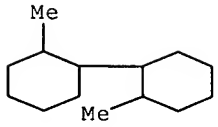
LANGUAGE: Unavailable

AB cf. C. A. 37, 3079.7. cis- and trans-2-Methylcyclohexyl chloride (I and II) with MeMgBr give 49 and 46% reaction, 10% addition product and 34 and 33%, resp., of unsatd. compound; the gas is pure CH4. Bornyl chloride (III) shows only 5% reaction, whereas isobornyl chloride (IV) shows 90% reaction, forming 90% unsatd. compound and pure CH4. In the presence of 5 mole-% of CoCl2, cyclohexyl chloride shows 86% reaction and yields 26% bicyclohexyl, 29% cyclohexene, 27% cyclohexane and gases (85% CH4, 9% C2H6 and 6% C2H4). I and II show 89 and 87% reaction and yield 22 and 27% 2,2'-dimethylbicyclohexyl, 31 and 23% of methylcyclohexene, 34 and 28% of methylcyclohexane and gases (83 and 77% CH4, 9 and 15% C2H6 and 8% C2H4). III and IV show 98 and 94% reaction, yielding 63 and 31% bibornyl, 20 and 44% of a mixture of camphene and bornylene, 15 and 19% of camphane and gases (72 and 77% of CH4, 19 and 15% of C2H6 and 9 and 8% of C2H4). The significance of the formation of the dimers in the presence of CoCl2 is discussed.

IT ***855310-24-6P***, Bicyclohexyl, 2,2'-dimethyl-
RL: PREP (Preparation)
(preparation of)

RN 855310-24-6 HCAPLUS

CN Bicyclohexyl, 2,2'-dimethyl- (4CI) (CA INDEX NAME)



L54 ANSWER 414 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1942:31087 HCAPLUS Full-text
DOCUMENT NUMBER: 36:31087
ORIGINAL REFERENCE NO.: 36:4808b-i,4809a
TITLE: Polycyclopentyls
AUTHOR(S): v. Braun, Julius; Reitz-Kopp, Johanna
SOURCE: Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (*1941*), 74B, 1105-10
CODEN: BDCBAD; ISSN: 0365-9488
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

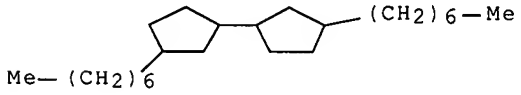
AB As previously shown (C. A. 31, 7404.3), the reactive 2-cyclopentenyl chloride (I) lends itself to the preparation of polycyclopentyls by treatment with cyclopentylmagnesium bromides. The question of the structure of the products is greatly simplified by the fact that the unions of several rings and the substitutions, after addition of HBr at the double bond of the cyclopentenyl residue, always take place at the 1,3-positions on the cyclopentyl ring. It was to be expected that the building up of long chains of 5-membered rings would offer no particular difficulty and it seemed of interest to determine how the phys. properties and reactivities of these compds. would be affected by increasing chain length. There is no marked difference in the reactivities of aliphatic and aromatic bromides in Grignard syntheses with I, as shown by 2 parallel series of expts. leading to derivs. of cyclopentane and bicyclopentyl in the one and of bi- and quatercyclopentyl in the other. The alkylmagnesium bromides in the one series and the alkyl-substituted cyclopentylmagnesium bromides in the other had the same number of C atoms so that the individual reaction steps could be satisfactorily compared in every respect. In the Grignard syntheses with CO2 there were formed, in both series, in addition to the carboxylic acid, about 10% of a hydrocarbon from 2 bromide mols. The chain-form union of several cyclopentyl rings is effected with better yields by these Grignard syntheses than by the Wurtz method. Whereas in the previous Grignard syntheses with I practically only reaction between I and the Grignard compound had occurred, with bicyclopentylmagnesium bromide there was also hydrocarbon formation from the 2 bromides, to about the same extent as in the carboxylic acid syntheses. The reaction of tercyclopentyl bromide with Na is considerably more sluggish than the corresponding reactions in the 1st two series of reactions mentioned above. The d. and n of the polycyclopentyls are simple functions of the chain length. The b.-p. values give an indication that chains with an odd number of rings boil relatively a few degrees lower than those with an even number of rings. The b. ps. are 5-15° higher than those of the normal paraffins with an equal number of C atoms. 3-Heptylcyclopentene (50% from I and heptyl bromide by the Grignard reaction in ether), b15 102°, d421 0.8072; heated 10 h. in a sealed tube at 100°, or shaken 50 h., with excess of fuming HBr, it gives more than 70% of 3-bromo-1-heptylcyclopentane (II), b0.2 97-102°. II reacts considerably more slowly than the Et homolog with Mg; after several hrs. treatment (in a CO2-toluene cooling mixture) with solid CO2, the ether solution yields 22% of 3-heptyl-1-cyclopentanecarboxylic acid, faintly yellowish oil, b13 186-8°, d415 0.9462, nD20 1.46165, and about 10% of 3,3'-diheptylbicyclopentyl, faintly yellowish, b0.05 182-5°, d420.5 0.8668, nD20 1.47363, also obtained in about 30% yield

from II and Na heated about 20 h. on the water bath in ether and a few drops of AcOEt. 3-(3-Cyclopentenyl)-1-ethylcyclopentane (34% from 3-EtC5H5MgBr and I), b12 75-85°, d418 0.8815, nD20 1.47215. 3-Bromo-3'-ethylbicyclopentyl (77%), b16 135°, b0.2 95-105°; 3'-ethylbicyclopentyl-3- carboxylic acid (yield poor), yellowish, b0.1 130°, d420 0.998. Diethylquatercyclopentyl (also obtained in 20% yield by the Wurtz method), b0.3 160-70°, d418 0.9135, nD20 1.49834. The Mg compound of 3-bromobicyclopentyl and I give 12% quatercyclopentyl, b9 205-7°, d415.5 0.9645, and 20% 3-(2-cyclopentenyl)bicyclopentyl (III), b10 139-40°, which is hydrogenated with Pd in MeOH to tercyclopentyl, b12 144°, d421 0.9296, nD20 1.49350. Shaken several days with fuming HBr, III gives bromotercyclopentyl (about 50%), b10 182°, d416.5 1.1939, which, heated 60 h. in ether with Na on the water bath, yields 40% sexicyclopentyl, viscous yellow oil, b0.1 235°, d423 0.9832, nD20 1.52345, partly solidifies on long standing; after pressing on clay, the solid (about 10% of the whole) m. 143-6°.

IT ***855262-13-4P***, Bicyclopentyl, 3,3'-diheptyl-
RL: PREP (Preparation)
(preparation of)

RN 855262-13-4 HCAPLUS

CN Bicyclopentyl, 3,3'-diheptyl- (4CI) (CA INDEX NAME)



L54 ANSWER 415 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1939:47909 HCAPLUS Full-text

DOCUMENT NUMBER: 33:47909

ORIGINAL REFERENCE NO.: 33:6807g-i,6808a-g

TITLE: Hydrocarbons of the cyclopentane series

AUTHOR(S): Suida, Hermann; Gemassmer, Alois

SOURCE: Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (*1939*), 72B, 1168-73
CODEN: BDCBAD; ISSN: 0365-9488

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

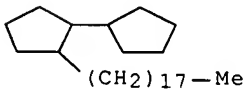
AB Cyclopentanes with high mol. wts. (300-500) have neither been isolated from petroleum nor synthesized as model substances, probably because of the difficulty of introducing long side chains into the cyclopentane mol. Attempts to bring about a reaction between methylcyclopentane and dodecyl chloride by the Friedel-Crafts method were completely unsuccessful; more vigorous conditions might have given results but had to be avoided because of the isomerizations to be expected. The Fittig-Wurtz synthesis gave no better results; either there was no reaction or, under more vigorous conditions, HCl was split off and resinification occurred. The Grignard reaction under very definite conditions, however, gave excellent results. From cyclopentanone and its mono- and dicyclopentyl derivs. with octadecyl chloride, e. g., there were smoothly obtained the octadecylcyclopentanols which were converted with KHSO4 into octadecylcyclopentenes, and these with H and Pt sponge (Pd on BaSO4 reacted too sluggishly) gave the octadecylcyclopentanes. Hexadecyl chloride reacted just as smoothly. Myricyl bromide also reacted but working up of the product presented great difficulties and it has as yet not been possible to isolate an irreproachably pure compound Mono- and dicyclopentylpentanones react less homogeneously; with increase in the number of rings increasingly

large losses occur, probably through enolization of the ketones which then react to form the aliphatic hydrocarbons; considerable octadecane was isolated, and there was also an appreciable reduction of the pentanone to the pentanol. For comparison octadecylcyclohexane (I) and octadecylbenzene (II) were also prepared I had been prepared by Mikeska (C. A. 30, 6178.5) by pressure hydrogenation of the benzene derivative, but under such severe conditions decompns. and rearrangements undoubtedly occur, and the consts. of his I do not agree entirely with those of S. and G.'s product prepared by the Grignard method. S. and G. have also found that cyclopentanes with 2 long side chains can likewise be prepared although they have not as yet been able to isolate such compds. in pure state. 1-Cyclopentenylcyclopentan-2-one (Wallach, Ber. 29, 2964 (1896)), b3 84°; 1,3-dicyclopentenyl compound, b3 154°. Hydrogenation with a Pd catalyst in autoclaves at 80° gave the corresponding cyclopentyl compds., b8.5 90°, nD20 1.4763, and b12 167°, nD20 1.4956, resp. 1-Cyclopentyl-2- cyclopentanol (95% from the pentanone with Na), b11 107°, m. 20°; 1,3-dicyclopentyl compound (95%), b13 171°, m. 68°. 1-Cyclopentyl-2-chlorocyclopentane, from the pentanol with HCl and 1% ZnCl2, b22 97°, d420 0.9611; dicyclopentyl compound, b13.5 158°, d420 0.9542. Myricyl alc., b0.001 254°, m. 85.3°. The Grignard compds. were prepared with a "Gilman catalyst" and the Mg was alloyed with 14% Cu. To conveniently and completely exclude moisture a special apparatus (sketch given), which is of general applicability, was used. Octadecylcyclopentene, b3 173-4°, m. 19°, I number 77, mol. refr. 318, d420 0.8462; cyclopentane, b3 175-6°, m. 23°, d420 0.8340, nD20 1.4583, mol. refr. 105.6, surface tension 26.35 dynes/cm., mol. weight 320.5. 1-Methyl-3- octadecylcyclopentene, b2 179°, m. 18°, d420 0.8482, I number 75, mol. weight 329; cyclopentane, b0.001 161-2°, m. 21.5°, d420 0.8338, nD20 1.4599, mol. refr. 110.5, surface tension 26.45 dynes/ cm., mol. weight 334.5. 1-Octadecyl-2-cyclopentylcyclopentene, b0.001 196-7°, m. about 5-10°, d420 0.8901, I number 64, mol. weight 382; cyclopentane, b. 197°, m. around 18°, d420 0.8684, nD20 1.4772, mol. refr. 126.9, mol. weight 388. 1-Octadecyl-2,5- dicyclopentylcyclopentene, b0.001 225-7°, m. below 10°, d420 0.9041, I number 60, mol. weight 451; not enough was available for reduction to the cyclopentane. Octadecylcyclohexene (obtained in 45% yield, with 23% recovered octadecyl chloride, octadecane and octadecene, and 18% hexatriacontane), b3 179-80°, m. 20°, d420 0.8458, I number 79, mol. weight 330; I, b3 180°, m. 23.5°, d420 0.8335, nD20 1.4601, mol. refr. 110.5, mol. weight 338, surface tension 25.7 dynes/cm., viscosity 7.96 and 2.67 c. s. t. at 100° and 210°F. (M. gives 13.24 and 3.39). II, prepared from benzene and stearyl chloride with subsequent Clemmensen reduction, or from benzene and octadecyl chloride by the Friedel-Crafts method, b3 183°, m. 30°, d420 0.8563, nD20 1.4828, mol. refr. 110.1, mol. weight 329.

IT ***855262-11-2P***, Bicyclopentyl, 2-octadecyl-
RL: PREP (Preparation)
(preparation of)

RN 855262-11-2 HCAPLUS

CN Bicyclopentyl, 2-octadecyl- (4CI) (CA INDEX NAME)



L54 ANSWER 416 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1937:53382 HCAPLUS Full-text
DOCUMENT NUMBER: 31:53382
ORIGINAL REFERENCE NO.: 31:7404c-i,7405a-g

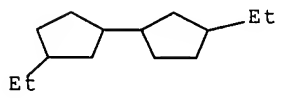
TITLE: Transformations of cyclopentadiene
AUTHOR(S): v. Braun, Julius; Kamp, Erich; Kopp, Johanna
SOURCE: Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (*1937*), 70B, 1750-60
CODEN: BDCBAD; ISSN: 0365-9488
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB It had been found (C. A. 22, 1146) that 2-cyclopentyl chloride (I) reacts like allyl chloride with aromatic Grignard reagents and the resulting arylcyclopentenes take up HBr to form 2-arylcyclopentyl bromides As was expected, nonaromatic Grignard reagents act in the same way with I and addition of HBr to the products offers no difficulty but, contrary to the aromatic compds., it results in the formation of 3-alkylcyclopentyl bromides. Their structure was proved by the reaction recently described (C. A. 28, 2329.3): replacement of the Br by CO2H by means of Mg and CO2, α-bromination of the acid, and conversion of the Br acid into the acid chloride which with NaN3 gave a 3-alkylcyclopentanone. HBr thus adds to the alkylcyclopentenes in just the opposite way to its addition to the aryl compds. O and halogens, like Ph, attract electrons but their effect decreases rapidly with distance and, as was expected, β-2- cyclopentenylethyl alc. (II) heated with HBr gave, together with some of the unsatd. bromide (III), the saturated β-(3-bromocyclopentyl) ethyl bromide (IV). It was attempted to prove the structure of IV by replacing both Br atoms with CO2H but the dicarboxylic acid could not be obtained pure. That, however, it was not the 2-Br compound was indicated by the fact that with 1 mol. malonic ester and 2 atoms Na it gave, along with high-mol. compds., and a brominated ester of lower mol. weight, only a small amount (30%) of a compound C14H22O2 (V). Had the ring-substituted Br in IV been in the 2-position, the strainless bicyclo (0.3.3)octane derivative would undoubtedly have been formed very smoothly. V is believed to be the bicyclo (1,2,3) octane It is decarboxylated to the monocarboxylic acid (VI) by means of which it is hoped to develop the field of these bicyclo compds., representatives of which (with the exception of the Komppa ketone) are as yet known only in a few complex derivs. of the camphor series. Thus far it has not been possible to pass from IV to the parent hydrocarbon of the bicyclo(1.2.2.)heptane series; as was to be expected from the strain existing in the latter system, the action of Na on IV is exclusively extramol. and there results a mixture, boiling within wide limits, of hydrocarbons (C7H12)n of varying mol. weight 2-Ethylcyclopentene (VII) (30% yield), b768 99-103°, d420 0.7874, nD20 1.43030. It readily adds Br in CS2 to form a liquid dibromide, b12 98-100°, faintly yellow but soon decomposing and darkening. 3-Bromo-1- ethylcyclopentane (65% from VII shaken 50 hrs. with 2-3 vols. fuming HBr), b42 84-6°, d420 1.2597. It reacts readily with Mg and when the product is treated with CO2 and worked up in the usual way it gives the Na2CO3-insol. 3,3'-diethylbicyclopentyl, b15 125°, d415 0.8757, nD20 1.47097, and the Na2CO3-soluble 3-ethylcyclopentanecarboxylic acid, b15 132-4°, whose acid chloride, b11 176-8°, with 1 mol. Br at 125° gives almost quantitatively the α-Br derivative, b11 110°, and this, in pyridine solution or suspension, heated with NaN3, then treated with alc. and alkali, acidified with HCl after 15 min. and distilled with steam, yields 3-ethylcyclopentanone, b. 150°, forming a semicarbazone, m. 175°, and with m-O2NC6H4CHO, alc. and a trace of alkali, a lemon-yellow condensation product, C20H18O5N2, m. 142°. 2-Isoamylcyclopenten (60%), b59 86-7°, does not darken on standing, d422 0.7969. 3-Bromo-1-isoamylcyclopentane, b15 109-10°; 3-carboxylic acid, b20 160°, d420.5 0.9566. 2-Dodecylcyclopentene (50%), b15 172°, d416 0.8262, nD20 1.45667. Addition of HBr requires long heating, a considerable part of the hydrocarbon remaining unattacked even after 15 hrs. The 3-bromo-1-dodecylcyclopentane b0.1 163°, d414.5 0.9811. Mg and CO2 give, with some 3-carboxylic acid, m. 29°, chiefly dodecylcyclopentane, b15 175°, d418 0.8280,

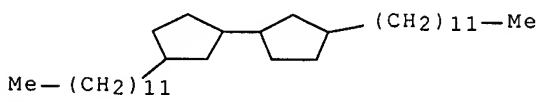
nD20 1.45737 and 3,3'-didodecylbicyclopentyl, b0.2 260° (the latter is a semi-solid thick oil, probably consisting of a mixture of stereoisomers). The cyclopentene forms a dibromide, b0.2 180° without appreciable decomposition but becomes discolored on standing. C5H9MgCl and I react very vigorously, yielding somewhat more than 60% 2-cyclopentenylcyclopentane, b9 60-4°, d420 0.8838; shaken 60 hrs. with fuming HBr, it gives almost 80% 3-bromobicyclopentyl, b9 115°, which with Mg and CO2 yields bicyclopentyl, b9 67°, almost pure tetracyclopentyl, (C5H9C5H8-)2, b9 205-7°, and about 30% bicyclopentyl-3-carboxylic acid, b13 172°, d419 1.0398; acid chloride, b10 125°, gives 70% of the α-Br derivative, faintly yellow, b0.3 128-32°, which with NaN3 yields 3- cyclopentylcyclopentanone, volatile with steam (oxime, b10 145-6°, m. 46°; semicarbazone, m. 184°; bis(m-nitro-benzal) derivative, yellow-red, m. 172°). 2-Cyclopentenyl-cyclohexane (60%), b12 80-5°, d418 0.8995, nD20 1.48698. 3-Bromo-1-cyclohexylcyclopentane (70%), b11 132-6°, becomes yellowish and splits off a little HBr on standing; Mg and CO2 give cyclopentylcyclohexane, b11 86-8°, d423 0.8886, nD20 1.47491, 15% 3,3'-dicyclohexylbicyclopentyl, b0.1 180°, d418 0.9592, nD20 1.51290, and about 15% 3- cyclohexylcyclopentanecarboxylic acid, b11 180°, d417 1.0343, nD20 1.49255; the acid chloride, b11 142-4°, gives an α-Br derivative, b0.05 140-2°, which with NaN3 yields 3-cyclo-hexylcyclopentanone, b10 126°, d419 0.9730, nD20 1.48476 (semicarbazone, m. 186°; bis(m-nitrobenzal) derivative, orange, m. 122°). Et 2-cyclopentenylacetate, from the acid heated 3 hrs. on the water bath with 2 parts by weight of EtOH and 0.1 part concentrated H2SO4, b12 81°. With 10 atoms Na in EtOH it gives 70% II, b15 82-3°, d423.5 0.9432, nD25 1.4695, vigorously decolorizes KMnO4, readily takes up 2 H atoms with Pd to give β-cyclopentylethyl alc. (also obtained from C5H9CH2CO2Et with Na and alc.), bit 84-5°,which with HBr at 100° gives almost 100% of the bromide, C5H9CH2CH2Br, b11 70-1°. The fraction b0.4 below 100° (chiefly around 70°) of the product of the reaction of II with HBr and which consists chiefly of III with unchanged II, gives with NHMe2 in benzene at 100° the unsatd. base, C5H7CH2CH2NMe2, b13 66-8°, d421 0.8291 (picrate, m. 136-8°; chloroplatinate, m. 148°; methiodide, m. 223°). IV, b0.4 100°, darkens only on long standing. V, b12 155-60°; free dicarboxylic acid, powder, m. 189-90° (foaming) with formation of VI, b13 150-2°, d426 1.0603.

IT ***855262-15-6P***, Bicyclopentyl, 3,3'-diethyl- ***855262-17-8P***, Bicyclopentyl, 3,3'-didodecyl-
RL: PREP (Preparation)
(preparation of)

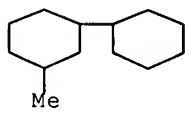
RN 855262-15-6 HCAPLUS
CN Bicyclopentyl, 3,3'-diethyl- (4CI) (CA INDEX NAME)



RN 855262-17-8 HCAPLUS
CN Bicyclopentyl, 3,3'-didodecyl- (4CI) (CA INDEX NAME)



L54 ANSWER 417 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1933:32746 HCAPLUS Full-text
DOCUMENT NUMBER: 27:32746
ORIGINAL REFERENCE NO.: 27:2940g-h
TITLE: Pressure hydrogenation of 3-methyl-5-phenyl-2-cyclohexen-1-one and 3-p-tolyl-5-phenyl-2-cyclohexen-1-one
AUTHOR(S): Petrov, A. D.; Antzus, L. I.
SOURCE: Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (*1933*), 66B, 420-3
CODEN: BDCBAD; ISSN: 0365-9488
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB 3-Methyl-5-phenyl-2-cyclohexen-1-one, b7 169-70°, hydrogenated 25-60 hrs. at 225-45° with twice the calculated amount of H and freed of aromatic hydrocarbons with concentrated H2SO4, yields 3-methyl-5-cyclohexylcyclohexane, b. 243-3.5°, d420 0.88668, nD20 1.4840. Benzylidene-p-methylacetophenone, m. 77-8°, from p-MeC6H4COMe and BzH, gives with AcCH2CO2Et and Na in alc. 3-p-tolyl-5-phenyl-6-carbethoxy- 2-cyclohexen-1-one, m. 133-4°, which with hot alc. KOH yields 3-p-tolyl-5-phenyl-2-cyclohexen-1-one, pale yellow, m. 106°. Pressure hydrogenation of the latter gave a very viscous oil, the chief fraction of which, after purification with H2SO4, b8 194-8°, d2020 0.9552, nD20 1.5202, and consisted of 3-p-methylcyclohexyl-1-cyclohexylbenzene.
IT ***29460-88-6P***, Bicyclohexyl, 3-methyl-
RL: PREP (Preparation)
(preparation of)
RN 29460-88-6 HCAPLUS
CN 1,1'-Bicyclohexyl, 3-methyl- (9CI) (CA INDEX NAME)



L54 ANSWER 418 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1933:26895 HCAPLUS Full-text
DOCUMENT NUMBER: 27:26895
ORIGINAL REFERENCE NO.: 27:2430a-i,2431a-c
TITLE: Bicyclic hydrocarbons. Cyclohexylidenecyclohexane and bicyclohexyl
AUTHOR(S): Zelinskii, N. D.; Shuikin, N. I.; Fateev, L. M.
SOURCE: Zhurnal Obshchei Khimii (*1932*), 2, 671-80
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 25, 2420. It was shown before that the hydrazone of cyclopentylidenecyclopentanone,CH2.(CH2)3.C:C.CO.(CH2)2.CH2 I, by decomposition with powdered Pt and KOH gives not the expected cyclopentylidenecyclopentane, but 1,1-tetramethylenebicyclohexane. A similar reaction with the hydrazone of cyclohexylidenecyclohexanone (II) proceeds normally with the formation of cyclohexylidenecyclohexane (III). The peculiar

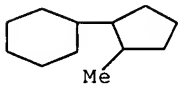
reaction of I is attributed to a specific function of the pentacyclic ring. Pure III was used in the new method for preparation of bicyclohexyl (IV). Schrauth and Gorig (C. A. 18, 388) reported the isolation of "3 spatial isomers" of IV, b750 219-21°, 227-8° and 235-7°, resp., basing their conclusion on the theory of Sachse (Ber. 23, 1363(1890)) and Mohr (C. A. 13, 2661). Huckel, et al. (C. A. 24, 2113) showed that by dehydration of trans-o-cyclohexylcyclohexanol with ZnCl2 is formed 1- cyclohexylcyclohexene together with 15% of an isomerization product, which is considered to be 1- hexahydrobenzylcyclopentene. The latter gives by reduction hexahydrobenzylcyclopentane, which explains the 3 pseudoisomers of IV of S. and G. In the dehydration of o-cyclohexylcyclohexanol (V), with such a highly isomerizing agent as ZnCl2 there is possible an isomerization of a different type with formation of 1-cyclohexyl-2- methylcyclopentene (VI), which was obtained by dehydration of 2-methyl-1-cyclohexyl-1-cyclopentanol (VII), with KHSO4. VI by reduction produced 2-methyl-1-cyclohexylcyclopentane (VIII), traces of which present in IV will depress its phys. consts. IV synthesized by Wallach (C. A. 1, 1006) by heating V with HI shows very low phys. consts., b744 225.5-7°, nD20 1.4701, d420 0.8680, as compared with the consts. of C12H22 obtained by the same method, b754 236.5-8°, nD20 1.4842, d420 0.8912, m.- 12°. Wallach's IV must be a mixture of IV with its products of isomerization. IV was obtained by dehydration of 1-cyclohexylcyclohexanol (IX) and reduction of the resulting α-cyclohexenecyclohexane (X) (Sabatier and Murat, C. A. 6, 2082), b. 238°, nD20 1.4794, d420 0.8857. Thus the properties of the 3 prepns. of IV obtained by different methods, and the results of H. and N. (l. c.) do not seem to indicate the existence of stereoisomeric forms of IV. However there were obtained 2 prepns. of IV differing considerably from those described above, which precludes a pos. denial of the possible existence of spatial isomers of IV. Exptl. part.-II, obtained by passing dry HCl into cyclohexanone in Et2O with cooling, and decomposing the crystalline mass of 1-cyclohexyl-1-chloro-2-cyclohexanone with 25% KOH, b19 149-50°, nD18 1.5093, d418 1.0043, mol. refr. 52.99, calculated 52.76; semicarbazone, m. 189-90°. III, prepared from the hydrazone of II by repeated distillation over 5% solid KOH in the presence of platinized kaolin, b742 236-7°, nD15 1.4955, d415 0.0109, mol. refr. 52.60, calculated 52.75. V was prepared by reducing with Na II or cyclohexanone, b21 151-2°, nD23 1.5053. In the reduction the CO group of II is reduced to alc. before the saturation of the double bond, with formation of o-cyclohexylidenecyclohexanol, b20 152-3°, nD24 1.5093, d424 1.0014, mol. refr. 53.75, calculated 54.27. The action of HI on V at various temps.-(a) A mixture of 25 g. non-crystalline V and 3 vols. of HI (d. 1.92) was heated 24 hrs. at 100-10° in a sealed tube, then the iodide was treated in the cold with Zn dust in the presence of HI, and heated, the hydrocarbon distilled off with steam, twice redistd. over Na, passed over Pt-asbestos in H at 210-5°, and again distilled over Na, m.-12°, b754 236-8°, nD20 1.4842, d420 0.8912, mol. refr. 53.36, calculated for C12H22 (IV) 53.22. By working with HBr (d. 1.82) as described above there was obtained the identical product. Dehydrogenation over Pd-asbestos at 300° produced only Ph2, crystals from alc. m. 69-70°. (b) A mixture of 40 g. crystalline V and 4 vols. of HI was heated 9 hrs. at 240-50° in a sealed tube, producing a hydrocarbon without a constant m. p., which, repeatedly redistd., gave 1.5 g., b. 221-5° (corrected), nD21 1.4663, d420 0.8600, mol. refr. 53.54, and 16 g. b. 253-4° (corrected), nD19 1.4731, d420 0.8768, mol. refr. 53.14; neither fraction crystallizes at -20°. The main fraction dehydrogenated at 300° over Pt-C produced chiefly Ph2, the unreacted part (3 g.) reduced with Pt-C, b. 225-7° and analyzed for C12H22. (c) A mixture of 300 g. crystalline V and 3 vols. of HI was heated 9 hrs. at 260-80° and repeatedly redistd., producing 3 fractions: 3 g., b. 200-21°, nD18 1.4877, 16 g., b. 223-8°, nD18 1.4728, and 65 g., b. 230-4°, nD20 1.4763. Subjected to exhaustive dehydrogenation over Pt-C, the 1st fraction remained unchanged, while the other 2, containing considerable IV, gave good yields of Ph2, which was frozen out and filtered off at -10°, and the residue passed over Pt-C at 210-20°, then repeatedly redistd., giving 3 fractions: 1 g., b.

193-9°, nD19 1.4600, 1.5 g., b. 210-6°, nD19 1.4675, and 5 g., b. 226-8.5°, nD20 1.4728, d420 0.8718, mol. n 53.45. None of the fractions solidified at -20°. The properties of the fraction b. 226-8.5° indicate its intermediate position between 3,3-dimethylbicyclopentyl, b. 213-5°, nD20 1.4582, d420 0.8483, and IV, and is considered as consisting chiefly of methylcyclopentylcyclohexane, i. e., a product of a profound isomerization of some cycle in IV. VII was obtained in 30 g. yield together with other condensation products from 100 g. 2-methylcyclopentanone and C6H11MgBr; VII b8 119°, nD16 1.4983, d416 0.9884, mol. refr. 55.15, calculated for C12H22O 54.74. VII treated with KHSO4 at 180-90° produced VI, b. 228-30°, nD18 1.4880, d418 0.8909, mol. refr. 53.06, calculated for C12H20 52.75. VI reduced over Pt-C at 200° produced VIII, redistd. over Na, b744 225.5-7°, nD20 1.4701, d420 0.8680, mol. refr. 53.36. VIII does not solidify at -20°, and closely resembles the fraction b. 226-8° obtained by the interaction of V and HI at 260-80°. III, subjected to 4 hydrogenations at 220° over Pd-asbestos at a rate of 4-5 drops a min., produced IV, b743 235.5-7°, nD21 1.4785, d421 0.8856, mol. refr. 153.16. IV does not react with KMnO4, and is converted to Ph2 by dehydrogenation with Pd-asbestos at 305° in a weak current of H. IX was obtained by interaction of C6H11MgBr and cyclohexanone. From 120 g. bromo- cyclohexane resulted 50 g. IX, b8.5 124-5°, b10.5 128-9°, and 14 g. IV, b. 237.5-8°, m. -12°, nD20 1.4842, d420 0.8914, mol. refr. 53.35. IX, heated with KHSO4 at 180-90°, produced X, b. 238.5°, b10.5 105° and b8.5 100°, nD20 1.4969, d420 0.9086, mol. refr. 52.86, calculated for C12H20 52.75. X reduced at 220-5° over Pt-C produced IV, b. 237.5° (corrected), m. 3.5-4°, nD20 1.4794, d420 0.8847, mol. refr. 53.24.

IT ***5405-90-3P***, Cyclohexane, (2-methylcyclopentyl)-
RL: PREP (Preparation)
(preparation of)

RN 5405-90-3 HCAPLUS

CN Cyclohexane, (2-methylcyclopentyl)- (8CI, 9CI) (CA INDEX NAME)



L54 ANSWER 419 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1927:7423 HCAPLUS Full-text

DOCUMENT NUMBER: 21:7423

ORIGINAL REFERENCE NO.: 21:900b-i,901a

TITLE: Further studies on dehydrogenation catalysis: polynuclear hydrocarbons

AUTHOR(S): Zelinskii, N. D.; Titz, I.; Fataiev, L.

SOURCE: Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (***1926***), 59B, 2580-90
CODEN: BDCBAD; ISSN: 0365-9488

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

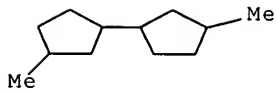
AB cf. C. A. 19, 2949. Earlier work has shown that only those 6-membered ring compds. which may be considered as hydrogenated aromatic derivs. are easily and smoothly dehydrogenated in contact with Pd or Pt (1,1-dimethylcyclohexane, e. g., does not undergo catalytic dehydrogenation). Similarly, 4-, 5- and 7-membered rings are not dehydrogenated. This generalization holds also for condensed systems; decahydronaphthalene is converted into C10H8 with the greatest ease. Of polycyclic compds. phenylcyclopentane cannot be

dehydrogenated, while cyclohexyl- and 1-methyl-3-cyclohexylpentane can, the dehydrogenation in these cases extending to the pentamethylene ring. This result was so unexpected and improbable that a number of these difficultly accessible hydrocarbons are being synthesized in order to obtain further exptl. data on the above point. Attempts to reduce cyclopentanol in moist Et2O with an excess of Na to the pinacol always gave cyclopentylcyclopentanol (I), b9 107-8°, d420 0.9862, nD20 1.4903 (yield, 16 g. from 70 g. of the ketone with 100 g. Na); at the same time is obtained an alc. C15H26O, b9 above 165°, m. 76-7°, probably produced from a primary condensation product, CH2.CH2.CH2.CH2C:C.CH2.CH2.CH2C:C.CH2.CH2.CH2.CO. From 21 g. I reduced in hot HI-AcOH with Zn dust and then with H and platinized charcoal at 180-90° was obtained about 7 g. of a product (III) supposed to be dicyclopentyl, b. 190-1° (corrected), d420 0.8780, nD20 1.4711, completely indifferent towards KMnO4 and Br but completely converted into naphthalene over platinized charcoal at 300°. The true dicyclopentyl (IV), obtained in small yield from bromocyclopentane and Na, b753 188-9°, d420 0.8604, nD20 1.4652, is indifferent towards Br, slowly oxidized by KMnO4, and does not undergo catalytic dehydrogenation. III is in all probability a mixture of cis- and trans-decahydronaphthalene, indicating that in the synthesis of I or its conversion into III a deep-seated isomerization has taken place at some point in the process. Reduction of 30 g. 1-methyl-3-cyclopentanone in boiling Et2O over 200 cc. of 30% KOH with 39 g. Na gave 10 g. of a saturated alc. C12H22O (V), b12 124-6°, d414.5 0.9483, nD14.5 1.4798, which with HI-AcOH-Zn dust and then H and nickelated Al2O3 at 200° gave a hydrocarbon C12H22 (VI), b. 218-9°, d418.5 0.8751, nD18.5 1.4755; this with platinized charcoal at 300° gave a compound C12H12 (VII), m. 91°, slowly soluble in concentrated H2SO4 with yellowish color, indifferent towards Br and KMnO4, forms a picrate, m. 130°; another preparation of VI yielded a VII, separated by fractionation from aqueous alc. into a portion, m. 106.5-7.0° (picrate, m. 143°), and one m. 77-8° (picrate. m. 134°). VII is apparently 1,7- or 2,7-dimethylnaphthalene or a mixture of these and VI is the corresponding decahydro derivative resulting from an isomerization of the polycyclic system in V by the HI used in the reduction of the V; VI is also obtained with Zn dust and aqueous HI or HBr. That the condensed (hydronaphthalene) ring system is not already present in the V is shown by the fact that when V is dehydrated with KHSO4 at 230-50° it yields 50% of its weight of an unsatd. hydrocarbon, C12H20 (VIII), b760 215-7°, d417 0.8676, which is reduced by palladinized charcoal and H at 200° to the compound, C12H22 (IX), b. 215-6° (corrected), d420 0.8451, nD20 1.4570; this does not undergo catalytic dehydrogenation. If, however, the VIII is reduced with HBr and Zn dust, and then Pt and H. it yields a product, b740 214-5°, d415.6 0.8548, d420 0.81518, which with Pt-charcoal at 300° gives a VII, m. 86-7° (picrate, m. 139°). The true 3,3'-dimethyldicyclopentyl (3 g. from 45 g. 3-methylcyclopentanol converted into the iodide with I and P and then treated in Et2O with Na), b. 213-5°, d420 0.8483, nD20 1.4582, cannot be dehydrogenated catalytically; its d. and n would seem to indicate that it is different from the product obtained by J. Schmidt and A. Sigwart from carbazole with HI (C. A. 6, 2623). The I and V probably have the normal dicyclopentyl structure although it is possible that they also may be isomerization products derived from a spirocyclic pinacolin. Dicyclohexyl, from cyclohexyl bromide and Na, b. 239.5-40° (corrected), d420 0.8847, nD20 1.4800, is catalytically dehydrogenated to Ph2.

IT ***25074-40-2P***, Bicyclopentyl, 3,3'-dimethyl-
RL: PREP (Preparation)
(preparation of)

RN 25074-40-2 HCAPLUS

CN Bicyclopentyl, 3,3'-dimethyl- (8CI) (CA INDEX NAME)

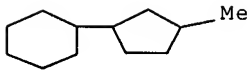


L54 ANSWER 420 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1926:11266 HCAPLUS Full-text
DOCUMENT NUMBER: 20:11266
ORIGINAL REFERENCE NO.: 20:1392h-i,1393a-d
TITLE: Catalysis and change in form of molecules
AUTHOR(S): Zelinskii, N. D.; Titz, I. N.
SOURCE: Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (*1925*), 58B, 2755-63
CODEN: BDCBAD; ISSN: 0365-9488
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB As the result on the one hand of his work on hydrogenation and dehydrogenation catalysis and, on the other, of observations made on certain transformations which occur under the influence of contact action (see, e. g., C. A. 19, 2333), Z. is convinced that intermediate chemical compds. are not a conditio sine qua non of catalytic processes but (cf. also Mendelyeev, J. Russ. Phys.-Chemical Society 18, 8(1886); Raschig, Z. angew. Chemical 19, 2049(1906); Bodenstein, C. A. 19, 924) that in such processes are involved changes in the motions of the mols. and atoms resulting from changes in form of the system produced by contact action; in the present paper are given further instances in support of his view. Cyclohexylcyclopentane (I) on catalytic dehydrogenation is attacked in both nuclei simultaneously, the product being not the expected phenylcyclopentane (II) but a compound C11H10 (III), which, however, cannot be phenylcyclopentadiene, as it has a completely saturated character; the cyclopentamethylene ring (IV) must, therefore, have suffered a deep-seated deformation during the dehydrogenation. II cannot be dehydrogenated with either palladinized or platinized asbestos, even with the assistance of platinized active charcoal; in order to be capable of undergoing dehydrogenation IV must, therefore, be combined with a hexahydrophenyl (V), not with a Ph residue; as V easily splits off H it forces IV to do the same. In 1-cyclohexyl-3-methylcyclopentane (VI), V, losing some of its H, forces the methylcyclopentyl ring to lose some also but the latter residue at the same time undergoes a deep-seated rearrangement, the sole product being Ph2. I, obtained by treating cyclopentanone with C5H11MgBr, boiling the resulting pentanol, b10 115-8°, with aqueous (CO2H)2 or treating it with KHSO4 and reducing the unsatd. hydrocarbon, b. 226-8°, with H and Pd-asbestos at 160°, b. 225-7°, d421 0.8813, nD21 1.4767 (it is also obtained by treating the pentanol with AcOH saturated at 0° with HI and then warming with Zn dust). III, which is provisionally assigned the structure PhCH , is obtained in 3 g. yield from 8.5 cc. I passed 3 times at the rae of 1 drop per min. through a 7 + 400-mm. tube filled with 30% palladinized asbestos at 300-5°; it m. 69.4°, b. 248-9°, does not react with Br, KMnO4, picric acid or K in boiling C6H6. Phenylcyclopentanol, from cyclopentanone and PhMgBr, b18 132-3°, d419 1.0609, nD19 1.5472, gives with HI-AcOH II, b. 215-7° d419 0.9503, nD191.5305. VI (8 g. from 16 g. of the pentanol, b15 125°, with HI-AcOH), b. 231-3°, d417 0.8902, nD17 1.4787.

IT ***251295-76-8P***, Cyclohexane, (3-methylcyclopentyl)-
RL: PREP (Preparation)
(preparation of)

RN 251295-76-8 HCAPLUS
CN Cyclohexane, (3-methylcyclopentyl)- (9CI) (CA INDEX NAME)

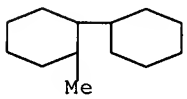


L54 ANSWER 421 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1925:22600 HCAPLUS Full-text
DOCUMENT NUMBER: 19:22600
ORIGINAL REFERENCE NO.: 19:2941g-i,2942a-b
TITLE: Some new derivatives of cyclohexane
AUTHOR(S): Garland, C.E.; Reid, E. Emmet
SOURCE: Journal of the American Chemical Society (*1925*), 47, 2333-40
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

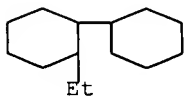
AB Alkyl-substitution products of (CH2)6 are of interest because they belong to the class of naphthenes that occur in petroleum in large amts. Cyclohexylidenecyclohexanone (I), b20 150-2°, b760 273-5°, d18 1.005, n 1.5082. Condensation of 2 equivs. of aldehyde with 1 part cyclohexanone (II) gave the following yellow 2.6-disubstituted products: di-p-iolylal, m. 170.1°; di-[2,4-dimethylbenzal], m. 115.5°; 2-furfural-6-cyclohexylidene, m. 80°; di-p-bromobenzal, m. 155.7°; the yields were 60-70%. 2,6-Dibenzalcyclohexanone tetrabromide, m. 184°. Catalytic hydrogenation gave the following derivs, of II: dibenzyl, m. 121°; di-p-methylbensyl, m. 111.8°; di-2,4-dimethylbenzyl, m. 105°; di-p-chlorobensyl, m. 148°; dianisyl, m. 157°; dipiperonyl, in. 146°. Addition of RMgX to I and allowing the mixture to stand 3 days gave tert. alcs. 1-Methyl-2-cyclohexylldenecyclohexanol, b20 146-8°, d40 0.9979, d420 0.9841, n 1.5107, M. R., 58.57. l-Et derivative, b20 155-7°, d420 0.9993, d420 0.9863, n 1.5120, M. R., 62.85 Catalytic reduction gives 1-methyl-2-cyclohexylcyclohexanol, b20 148.5-50°, d40 10.9850, n 1.5107, d420. 0.9719, n 1.5019, M. R., 59. 23 and the 1-Et derivative, b20 154-6°, d420. 0.9927, d420 0.9778, n 1.5058, M. R., 63. 21. These alcs. were then dehydrated by heating with C6H4(CO)2O at 165-70° for 5-6 hrs. 1-Methyl-6-cyclohexylidene-Δ'-cyclohexene, b20 130-2°, d40 0.9432, d420 0.9282, n 1.5165, M. R., 56.80. 1-Et derivative, b20 139-41°, d40 0.9461, d420 0.9308, n 1.5172, M. R., 61.22. 1-Et-2-cyclohexylcyclohexene, b20 141-3°, d40. 0.9406, d420 0.9274, n 1.5108, M. R., 61.53. 1-Methyl-2-cyclohexylcyclohexane, b20 131-3.5°, d40 0.9203, d420 0.9058, n 1.4968, M. R., 57.55; 1-Et deriv, b20, 141-2.5°, d40 0.9240, d420 0. 9120, n 1.4964, M. R. 62.44.

IT ***66324-47-8P***, Bicyclohexyl, 2-methyl- ***66826-94-6P***, Bicyclohexyl, 2-ethyl-
RL: PREP (Preparation)
(preparation of)

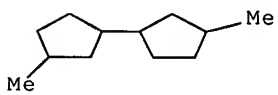
RN 66324-47-8 HCAPLUS
CN 1,1'-Bicyclohexyl, 2-methyl- (9CI) (CA INDEX NAME)



RN 66826-94-6 HCAPLUS
CN 1,1'-Bicyclohexyl, 2-ethyl- (9CI) (CA INDEX NAME)



L54 ANSWER 422 OF 422 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1912:18891 HCAPLUS Full-text
DOCUMENT NUMBER: 6:18891
ORIGINAL REFERENCE NO.: 6:2623a-c
TITLE: Conversion of Carbazole into Dimethyldicyclopentyl, a Hydrocarbon Occurring in Petroleum
AUTHOR(S): Schmidt, Julius; Sigwart, August
CORPORATE SOURCE: Stuttgart
SOURCE: Berichte der Deutschen Chemischen Gesellschaft (***1912***), 45, 1779-87
CODEN: BDCGAS; ISSN: 0365-9496
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Hexahydrocarbazole (Graebe and Glaser, Ann., 163, 343) is obtained quant. by heating 6 g. carbazole and 6 g. red P with 7 cc. HI (d. 2.02-2.05, obtained by saturating ice H2O) in a 200-50 cc. tube filled with CO2 5 hrs. at 130°. With MeI and MeOH in sealed tubes at 80-90°, it forms the methiodide, octahedrons or cubes, m. 194-5° (decompose), of N-methylhexahydrocarbazole, b748 294-5°, nD19 1.6248, d419 1.035; the latter has a moderate anesthetic action but is strongly irritating. Picrate, light yellow tables, m. 143-4° (decompose). Picrolonate, light yellow, silky needles, m. 174-5°. With 2 g. red P and 7 cc. HI (d. 1.75) in a 200 cc. tube filled with CO2, 3 g. carbazole give, after 8 hrs. at 230-40°, in good yield 3,3'-dimethyldicyclopentyl, C12H22 (G. and G.'s C12H30), b735 213-4°, d420 0.8784, nD20 1.4755, which gives PrCO2H when b. with HNO3 (d. 1.45). The hydrocarbon has a strong petroleum odor, and S. and S. believe it is identical with that isolated from a Louisiana oil by Coates (J. Am. Chemical Society, 28, 384).
IT ***25074-40-2***, Bicyclopentyl, 3,3'-dimethyl-
(from carbazole)
RN 25074-40-2 HCAPLUS
CN Bicyclopentyl, 3,3'-dimethyl- (8CI) (CA INDEX NAME)



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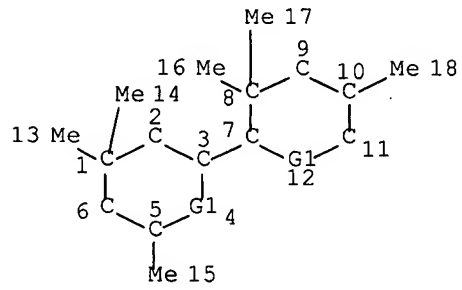


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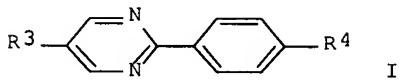
L60 ANSWER 1 OF 1 MARPAT COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 132:130262 MARPAT Full-text
TITLE: Nematic liquid crystal composition and display device using it
INVENTOR(S): Kim, Sung-Han; Lee, Yoo-Jin; Lim, Moo-Jong; Chung, Dong-Jin; Auh, Ki-Ha
PATENT ASSIGNEE(S): Samsung Electron Devices Co., Ltd., S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000026861	A	20000125	JP 1999-147292	19990526
PRIORITY APPLN. INFO.:			KR 1998-19039	19980526

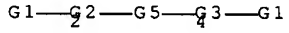
GI



I

AB The composition contains a compound having a formula R1AZ1GR2R3 (R1, 2 = C1-12 alkyl, C1-12 alkoxy, cyano, halogen, H; A, G = phenylene, biphenylene, cyclohexylene; R3 =Me, halogen, H; Z1 = single bond, CO2), a heterocyclic compound I (R3, 4 = C1-12 alkyl, C1-12 alkoxy), and a compound having a formula R3(EZ2)nR4 (Z2 = H, cyano, halogen; E = phenylene, biphenylene, cyclohexylene, divalent phenylcyclohexane). The device has a pair of electrode substrates sandwiching the composition The composition shows a nematic phase in a wide-temperature range and improved optical anisotropy and dielectricity. The composition is useful for a twisted-nematic liquid crystal display device with multiple driving property.

MSTR 1



G2 = cyclohexylene (opt. substd. by Me)
G3 = cyclohexylene (opt. substd. by 1 or more G4)
G4 = Me
G5 = bond
Patent location: claim 1

INVENTOR NAME SEARCH:

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FILE LAST UPDATED: 4 Jun 2007  (20070604/ED)

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=> s ansmann a?/au
L61        290 ANSMANN A?/AU

=> s both s?/au
L62         33 BOTH S?/AU

=> s prinz d?/au
L63         53 PRINZ D?/AU

=> s schoeffler n?/au
L64          1 SCHOEFFLER N?/AU

=> s westfechtel a?/au
L65         92 WESTFECHTEL A?/AU

=> s l61-65 and cosmet?
         84035 COSMET?
L66        162 (L61 OR L62 OR L63 OR L64 OR L65) AND COSMET?

=> s l66 and cyclo?
        920175 CYCLO?
L68         19 L66 AND CYCLO?

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L68  ANSWER 1 OF 19  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:        2004:719899  CAPLUS  Full-text
DOCUMENT NUMBER:         141:230316
TITLE:                   Emulsifier composition containing containing
                         hydrophilic and lipophilic emulsifiers for use in
                         transparent or translucent microemulsions, especially
                         deodorants
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INVENTOR(S): Bruening, Stefan; ***Ansmann, Achim***; Jackwerth, Bettina; Tappe, Kathrin
PATENT ASSIGNEE(S): Cognis Deutschland GmbH & Co. KG, Germany
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10307410	A1	20040902	DE 2003-10307410	20030220
WO 2004073673	A1	20040902	WO 2003-EP14601	20031219
W: JP, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
EP 1594453	A1	20051116	EP 2003-789356	20031219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
JP 2006518336	T	20060810	JP 2004-568416	20031219
US 2006182773	A1	20060817	US 2005-546282	20050819
PRIORITY APPLN. INFO.:			DE 2003-10307410 A	20030220
			WO 2003-EP14601 W	20031219

AB The invention concerns emulsifier compns. that are prepared from hydrophilic and lipophilic emulsifiers and used in transparent or translucent microemulsions, especially deodorants. Hydrophilic emulsifiers are selected from the group of (1) addition products of 8-30 Mol ethylene oxide with C16-C22 fatty alcs.; (2) addition products of 5-60 Mol ethylene oxide with C12-C18 fatty acid triglycerides; (3) addition products of 10-30 Mol ethylene oxide with sorbitan mono C12-C18 fatty acid esters; (4) addition products of 10-30 Mol ethylene oxide with C8-C18 fatty acid partial glycerides; (5) addition products of 1-10 Mol ethylene oxide and 1-5 Mol propylene oxide with C10-C18 fatty alcs. The used lipophilic alcs. are mono and diesters of C16-C18 fatty acids and glycerin and C16-C18 fatty alcs. Thus a deodorant cream contained (weight/weight%): Eumulgin B1 0.9; Eumulgin B2 7.5; Eumulgin HRE40 11.3; Cutina GMS 4.5; Lanette O 0.9; Cutina CP 0.9; DC 245 9.5; Cetiol CC 7.0; Cetiol S 9,5; Rezal 36 G Conc 40.0; water 8.0.

L68 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:757495 CAPLUS Full-text
DOCUMENT NUMBER: 139:250016
TITLE: Oil bodies for ***cosmetic*** compositions containing ***cyclohexylcyclohexane***
INVENTOR(S): Kawa, Rolf; ***Ansmann, Achim***; ***Prinz, Daniela***; ***Both, Sabine***
PATENT ASSIGNEE(S): Cognis Deutschland Gmbh & Co. Kg, Germany
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003077879	A1	20030925	WO 2003-EP2286	20030306
W: AU, BR, CA, CN, JP, KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				

IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

DE 10254315	A1	20031002	DE 2002-10254315	20021121
AU 2003214099	A1	20030929	AU 2003-214099	20030306
EP 1485063	A1	20041215	EP 2003-709753	20030306
EP 1485063	B1	20060510		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
JP 2005526078	T	20050902	JP 2003-575933	20030306
ES 2261922	T3	20061116	ES 2003-3709753	20030306
EP 1421929	A2	20040526	EP 2003-26023	20031112
EP 1421929	A3	20041124		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004142009	A1	20040722	US 2003-719588	20031121
US 2005220826	A1	20051006	US 2005-507674	20050408
PRIORITY APPLN. INFO.:			DE 2002-10211618 A	20020315
			DE 2002-10254315 A	20021121
			WO 2003-EP2286 W	20030306

AB The invention relates to a ***cosmetic*** agent, containing at least one aqueous phase and an oil phase that is non-soluble in the aqueous phase. The agent is characterized in that the oil phase completely or partially contains the ***cyclohexylcyclohexane***. Thus an O/W sunscreen lotion contained (weight/weight%): Eumulgin B2 2; Cutina E24 1; Cutina MD 2; Lanette 14 1; Lanette O 1; ***cyclohexylcyclohexane*** 2; Myritol 331 5; Dow Corning DC 244 4; Neo Heliopan Hydro sodium salt 2; Neo Heliopan AP sodium salt 2; Neo Heliopan 303 3; Neo Heliopan MBC 2; Uvinul T 150 2; zinc oxyde NDM 10; glycerin 5; water to 100.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:428658 CAPLUS Full-text
DOCUMENT NUMBER: 137:10729
TITLE: Fine-grained emulsions.
INVENTOR(S): Kawa, Rolf; Eskuchen, Rainer; ***Ansmann, Achim***
PATENT ASSIGNEE(S): Cognis Deutschland Gmbh & Co. Kg, Germany
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002043672	A1	20020606	WO 2001-EP13482	20011121
W: AU, BR, CN, JP, KR, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10059430	A1	20020606	DE 2000-10059430	20001130
AU 2002024862	A5	20020611	AU 2002-24862	20011121
EP 1337225	A1	20030827	EP 2001-994685	20011121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005506274	T	20050303	JP 2002-545650	20011121
US 2004029977	A1	20040212	US 2003-433114	20030529
PRIORITY APPLN. INFO.:			DE 2000-10059430 A	20001130
			WO 2001-EP13482 W	20011121

AB The invention relates to a method for producing emulsions having a particle size of between 0.1 and 5 μm, whereby oil bodies having a maximum polarity of

5 Debyes are mixed with emulsifying agents and water and are then homogenized under pressure. Thus, a formulation contained an oil (obtained from dicaprylyl carbonate 1.5, coco glycerides 2.5, castor oil 4.2, and Myreth-3 myristate 5.5 debyes) 16.0, an emulsifier mixture (Ceteareth-20 and Eumulgin VL-75) 1.0 and water to 100%.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:597773 CAPLUS Full-text
DOCUMENT NUMBER: 135:157407
TITLE: Highly viscous microemulsions based on sugar surfactants, oily bodies and aluminum salts and their use for the production of anti-perspirant gel and stick preparations
INVENTOR(S): Bruening, Stefan; ***Ansmann, Achim***; Lang, Susan; Guckenbiehl, Bernhard
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001058417	A1	20010816	WO 2001-EP986	20010131
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10005556	A1	20010823	DE 2000-10005556	20000209
EP 1257251	A1	20021120	EP 2001-909710	20010131
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2003118534	A1	20030626	US 2002-204866	20021216
US 6942871	B2	20050913		
PRIORITY APPLN. INFO.:			DE 2000-10005556 A	20000209
			WO 2001-EP986 W	20010131

OTHER SOURCE(S): MARPAT 135:157407
AB The invention relates to highly viscous microemulsions having a Brookfield viscosity of at least 100 000 mPas, containing: (a) sugar surfactants, (B) oily bodies and (C) aluminum zirconium salts. Preferred surfactants are alkyloligoglycosides and fatty acid-N-alkylpolyhydroxyalkylamides. The highly viscous microemulsions are used in the production of ***cosmetic*** gel and stick antiperspirant formulations. Thus a composition contained (weight/weight%): decyl glucoside 15; glyceryl oleate 8; dioctylcyclohexane 11; ***cyclomethicone*** 11; aluminum zirconium tetrachlorohydrex GLY 20; water to 100.
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:432779 CAPLUS Full-text
DOCUMENT NUMBER: 135:24428
TITLE: Hydroxyether-containing skin care products
INVENTOR(S): ***Ansmann, Achim***; Kawa, Rolf; Neuss, Michael
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: Ger. Offen., 14 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent

LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19959917	A1	20010613	DE 1999-19959917	19991211
WO 2001042180	A1	20010614	WO 2000-EP11938	20001129
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1206428	A1	20020522	EP 2000-979636	20001129
EP 1206428	B1	20040728		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
ES 2225266	T3	20050316	ES 2000-979636	20001129
US 2003161847	A1	20030828	US 2002-129581	20021204
US 7083780	B2	20060801		

PRIORITY APPLN. INFO.: DE 1999-19959917 A 19991211
WO 2000-EP11938 W 20001129

AB The invention concerns ***cosmetic*** and pharmaceutical skin compns. that contain hydroxyethers as oily particles; hydroxyethers are prepared by the ring opening of C6-C18 olefin epoxides with C1-C18 alcs. or C2-C18 polyols with 2-10 hydroxyl groups or water. Lipophilic solid particles are dispersed in the hydroxyethers, e.g. sunscreen, wax, stabilizer, pearly wax, polymers, partial glycerides. Thus an O/W -type sunscreen lotion contained (weight/weight%): C8 epo/octanol 6; Ceteareth-20 2; PETG 20-glyceryl stearate 1; glyceryl stearate 4; myristyl alc. 1; cetearyl alc. 1; PVP-hexadecene copolymer 1; cocoglycerides 5; ***cyclomethicone*** 4; phenylbenzimidazole sulfonic acid sodium salt 2; octocrylene 3; 4-methylbenzylidene camphor 2; octyl triazone 2, zinc oxide 10; glycerin 5; water, preservatives, NaOH ad 100 to obtain pH 5-6.

L68 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:227462 CAPLUS Full-text
DOCUMENT NUMBER: 132:255785
TITLE: Self-emulsifying water-in-oil emulsion bases
INVENTOR(S): ***Ansmann, Achim***; Bruening, Stefan; Kawa, Rolf; Strauss, Gabriele
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000018357	A1	20000406	WO 1999-EP6865	19990916
W: AU, BG, BR, BY, CA, CN, CZ, HU, ID, IN, IS, JP, KR, LT, LV, MX, NO, NZ, PL, RO, RU, SI, SK, TR, UA, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19843876	A1	20000413	DE 1998-19843876	19980925
AU 9960844	A1	20000417	AU 1999-60844	19990916
EP 1115365	A1	20010718	EP 1999-947369	19990916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002525301	T	20020813	JP 2000-571879	19990916

PRIORITY APPLN. INFO.: DE 1998-19843876 A 19980925
WO 1999-EP6865 W 19990916

OTHER SOURCE(S): MARPAT 132:255785

AB Self-emulsifying water-in-oil emulsion bases are provided which contain emulsifiers having an HLB index of 2.5-10, oily substances having a polarity ≤5 Debye, and lipophilic waxes. The lipophilic waxes dissolve in emulsifier-oil combinations having these properties to provide emulsion bases which are liquid at room temperature, stable during storage at elevated temps., and well suited to cold production of water-in-oil emulsions. The emulsion bases furthermore have low viscosity, are pumpable, and can optionally be produced free of metal soaps. Thus, a mixture of polyglyceryl-2 dipolyhydroxystearate 1, polyglyceryl-3 diisostearate 1, sorbitan sesquioleate 1, sorbitan stearate 1, dicocoyl pentaerythrityl distearyl citrate 1, cetyldimethicone copolyol 1, sorbitan tristearate (HLB = 2.1) 1, sorbitan trioleate (HLB 1.8) 1, dicaprylyl ether 1, cetearyl isononanoate 1, octyl stearate 1, coco glycerides 1, caprylic/capric triglyceride 1, and mineral oil 1 part was homogenized at .apprx.120° to produce a clear solution To this solution were added beeswax 2, microcryst. wax 2, Al stearate 2, and Mg stearate 2 weight parts to provide a clear solution which was cooled to room temperature and mixed with H2O to 100 weight parts to produce an emulsion base with a viscosity of 10 Pa s at 23° which was stable at 40° for 4 wk.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:819215 CAPLUS Full-text
DOCUMENT NUMBER: 132:54604
TITLE: Stick-shaped ***cosmetic*** compositions containing hydroxystearic acid and fatty alcohols, ketones and or ethers
INVENTOR(S): Bruning, Stefan; ***Ansmann, Achim***; Lang, Susan; Tesmann, Holger
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9966895	A1	19991229	WO 1999-EP4122	19990615
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19828020	A1	19991230	DE 1998-19828020	19980624
DE 19828020	B4	20051215		
EP 1089705	A1	20010411	EP 1999-929214	19990615
R: DE, ES, FR, IT				

PRIORITY APPLN. INFO.: DE 1998-19828020 A 19980624
WO 1999-EP4122 W 19990615

OTHER SOURCE(S): MARPAT 132:54604

AB Stick-shaped ***cosmetic*** compns. contain (a) linear fatty alcs. and 12-hydroxystearic acid, fatty ketones and/or fatty ethers. Mixts. of the above components have a strong thickening effect, even at low amts., and make it possible to produce antiperspirant and deodorant sticks, characterized by a particularly advantageous feeling on the skin. Thus, a deodorant stick contained ***cyclomethicone*** 15.0, octyldodecanol 5.0, stearyl alc. 3.1, and 12-hydroxystearic acid 0.7 g. The formulation was quite stable at up to 50°.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:603763 CAPLUS Full-text
DOCUMENT NUMBER: 131:219030
TITLE: ***Cosmetic*** and/or pharmaceutical emulsions
INVENTOR(S): ***Ansmann, Achim***; Kawa, Rolf
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19810012	A1	19990916	DE 1998-19810012	19980309
EP 945129	A2	19990929	EP 1999-103841	19990227
EP 945129	A3	20001115		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: DE 1998-19810012 A 19980309
OTHER SOURCE(S): MARPAT 131:219030
AB The title emulsions, containing polyol poly-12-hydroxystearates 0.1-10, alkyl and/or alkenyl oligoglycosides 0-10, silicones 0.1-20, and lower alcs. or polyols 5-20 weight%, are stable against phase separation during storage at 45° for ≥3 mo, are resistant to microbial growth even in the absence of preservatives, spread easily, and have good esthetic properties. Thus, a mixture of polyglyceryl-2 di(polyhydroxystearate) 5.0, decyl oleate 4.0, cetearyl isononanoate 4.0, hexyldecanol 3.0, dicaprylyl ether 3.0, and dimethicone 8.0 weight parts at 80° was combined with a mixture of 86% glycerin 5.0, EtOH 10.0, MgSO4 1.0, and H2O to 100 weight parts at 80° with stirring, and the combined mixture was cooled to 50°, homogenized, cooled to room temperature, and degassed to provide a lotion with a viscosity of 20 Pa s immediately after preparation and 30 Pa s after 40 days storage at 40°.

L68 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:196944 CAPLUS Full-text
DOCUMENT NUMBER: 130:356875
TITLE: Synergistic sun system concept. Utilization of synergies in the formulation of ***cosmetic*** sunscreen products
AUTHOR(S): Kawa, Rolf; ***Ansmann, Achim***; Jackwerth, Bettina; Leonard, Mark
CORPORATE SOURCE: Henkel K.-G.a.A., Duesseldorf, Germany
SOURCE: Parfuemerie und Kosmetik (1999), 80(3), 17-18,20,22-23
CODEN: PAKOAL; ISSN: 0031-1952
PUBLISHER: Huethig GmbH
DOCUMENT TYPE: Journal; General Review
LANGUAGE: German
AB Physiol. properties of sun care products were tested and described. The solubility characteristics of different sun care oils for crystalline UV filters, the dispersion characteristics of pigments, the enhancement of UV absorption, and the spreading behavior were investigated. A review is added on new emulsion technologies and polyfunctional performance profiles of new emulsifiers, oil components, and active ingredients.
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:709321 CAPLUS Full-text
DOCUMENT NUMBER: 129:320998
TITLE: Sunscreen containing chitosan
INVENTOR(S): Wachter, Rolf; ***Ansmann, Achim***; Kuehne, Sabine
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19716070	A1	19981022	DE 1997-19716070	19970417
DE 19716070	C2	20000824		
EP 879592	A2	19981125	EP 1998-106471	19980408
EP 879592	A3	20021009		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: DE 1997-19716070 A 19970417

AB Sunscreen emulsions containing oils, nonionic emulsifiers, chitosan, and UV filters are highly stable even at >50°, are water resistant, and are compatible with sensitive skin. A suitable composition contained coco glycerides 10.0, cetearyl glucoside/cetearyl alc. (50:50) 4.0, chitosan 0.1, benzophenone-3 2.0, octyl methoxycinnamate 7.5, glycerin 5.0, and water to 100 weight%.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:406233 CAPLUS Full-text
DOCUMENT NUMBER: 129:71950
TITLE: ***Cosmetic*** preparations containing dihydroxyacetone and tallow quaternary ammonium derivatives
INVENTOR(S): ***Ansmann, Achim***; Fabry, Bernd
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19652300	A1	19980618	DE 1996-19652300	19961216
DE 19652300	C2	19981008		
EP 852138	A1	19980708	EP 1997-121571	19971208

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: DE 1996-19652300 A 19961216

AB ***Cosmetic*** prepns. contain dihydroxyacetone and tallow quaternary ammonium derivs. and have high stability at high temps. Thus, a suntan composition contained ditallow quaternary ammonium compound 5.0, cetaryl glucoside and

cetyl alc. 5.0, cetareth-20 5.0, dihydroxyacetone 1.0, coco glycerides 10.0, oleyl stearate 5.0, glycerin 3.0, and almond oil 2.0 and water to 100%.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:406232 CAPLUS Full-text
DOCUMENT NUMBER: 129:85822
TITLE: ***Cosmetic*** preparations containing sunscreens and tallow quaternary ammonium derivatives
INVENTOR(S): ***Ansmann, Achim***; Fabry, Bernd
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19652299	A1	19980618	DE 1996-19652299	19961216
DE 19652299	C2	19981008		
EP 852139	A1	19980708	EP 1997-121572	19971208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: DE 1996-19652299 A 19961216
OTHER SOURCE(S): MARPAT 129:85822
AB ***Cosmetic*** prepns. contain sunscreens and tallow quaternary ammonium derivs. and have high stability at high temps. Thus, a sunscreen composition contained ditallow quaternary ammonium compound 5.0, cetaryl glucoside and cetyl alc. 5.0, cetareth-20 5.0, 2-ethylhexyl 4-methoxycinnamate 1.0, coco glycerides 15.0, octyldodecanol 5.0, glycerin 3.0, and water to 100%.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:253090 CAPLUS Full-text
DOCUMENT NUMBER: 128:312745
TITLE: ***Cosmetic*** stick preparations
INVENTOR(S): ***Ansmann, Achim***; Kawa, Rolf; Gondek, Helga
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19643063	A1	19980423	DE 1996-19643063	19961018

PRIORITY APPLN. INFO.: DE 1996-19643063 19961018
AB ***Cosmetic*** stick prepns. suitable, e.g., for lipstick, are disclosed which contain alkyl and/or alkenyl oligoglycosides, fatty alcs., oil bodies, emulsifiers, and natural waxes. The prepns. are free of microcryst. paraffin waxes and are noteworthy for their improved consistency, temperature resistance, oil-binding capacity, and appearance.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:38399 CAPLUS Full-text
DOCUMENT NUMBER: 128:119433
TITLE: Use of dialkyl ethers in silicone oil-containing ***cosmetic*** formulations
INVENTOR(S): ***Ansmann, Achim***
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19626905	A1	19980108	DE 1996-19626905	19960704
DE 19626905	C2	19990701		
EP 815837	A1	19980107	EP 1997-110498	19970626
EP 815837	B1	20011004		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
ES 2164963	T3	20020301	ES 1997-110498	19970626

PRIORITY APPLN. INFO.: DE 1996-19626905 A 19960704
OTHER SOURCE(S): MARPAT 128:119433
AB ***Cosmetic*** formulations containing silicone oil are protected from development of turbidity during storage by addition of a dialkyl ether. Thus, a mixture of dicaprylyl ether 50 and ***cyclodimethicone*** 50 weight% remained clear during storage at 40° for 3 wk. A baby oil was prepared containing this oil mixture 56.0, Myritol 318 40.0, and calendula oil 4.0 weight%.

L68 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:21372 CAPLUS Full-text
DOCUMENT NUMBER: 128:106235
TITLE: Sunscreen compositions in the form of oil-in-water microemulsions
INVENTOR(S): Foerster, Thomas; Claas, Marcus; Guckenbiehl, Berhard; ***Ansmann, Achim***
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft Auf Aktien, Germany; Cognis Deutschland GmbH & Co. KG
SOURCE: Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 813861	A2	19971229	EP 1997-109550	19970612
EP 813861	A3	19981230		
EP 813861	B1	20030122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
DE 19624455	A1	19980108	DE 1996-19624455	19960620
DE 19624455	C2	19980827		

PRIORITY APPLN. INFO.: DE 1996-19624455 A 19960620
OTHER SOURCE(S): MARPAT 128:106235

AB Sunscreen oil-in-water microemulsions containing (a) a lipid, (b) an alkyl and/or alkenyl oligoglycoside and/or a N-alkyl-N-polyhydroxyalkyl fatty amide, and (c) a UV filter are highly transparent and compatible with the skin and have excellent phase stability. Thus, an oil-in-water microemulsion containing Plantaren 1200 6.0, coco fatty N-methylglucamide 6.0, glyceryl oleate 6.0, octyldodecanol 3.0, Parsol MCX 5.0, and water to 100 parts showed 92% transparency and excellent stability during storage.

L68 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:13824 CAPLUS Full-text
DOCUMENT NUMBER: 128:106222
TITLE: Use of fats to replace silicone in the production of ***cosmetic*** and/or pharmaceutical preparations
INVENTOR(S): Kahre, Joerg; ***Ansmann, Achim***; Fabry, Bernd; Kawa, Rolf; Seipel, Werner
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft Auf Aktien, Germany
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9747281	A1	19971218	WO 1997-EP2866	19970603
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19623383	A1	19971218	DE 1996-19623383	19960612
DE 19623383	C2	19990701		
EP 914087	A1	19990512	EP 1997-927110	19970603
EP 914087	B1	20020206		
R: DE, ES, FR, GB, IT, NL				
JP 2000512284	T	20000919	JP 1998-501142	19970603
ES 2172791	T3	20021001	ES 1997-927110	19970603
US 2001006652	A1	20010705	US 1999-202318	19990204
US 6432419	B2	20020813		
PRIORITY APPLN. INFO.:			DE 1996-19623383 A	19960612
			WO 1997-EP2866 W	19970603

OTHER SOURCE(S): MARPAT 128:106222
AB Silicones in ***cosmetic*** or pharmaceutical prepns. are replaced with fats selected from (a) dialkyl ethers, (b) dialkyl ***cyclohexanes***, (c) guerbet alcs., (d) guerbet carbonates, (e) ester oils, (f) polyol polyhydroxystearates, and/or (g) hydroxycarboxylic acid esters. By comparison with silicones, these lipids give at least comparatively good results with regard to feel and gloss without building up on the skin and hair. Thus, a hair conditioner contained cetearyl alc. 3, cetrimonium chloride 4, glyceryl stearate 3, octyldodecanol 1, NaCl 0.5, and H2O to 100 weight%.

L68 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:510228 CAPLUS Full-text
DOCUMENT NUMBER: 127:113136
TITLE: Use of polyol poly-12-hydroxystearates as pigment dispersants for ***cosmetics***
INVENTOR(S): ***Ansmann, Achim***; Kawa, Rolf; Gondek, Helga
PATENT ASSIGNEE(S): Henkel Kgaa, Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19643062	A1	19970626	DE 1996-19643062	19961018
PRIORITY APPLN. INFO.:			DE 1996-19643062 A1	19961018
			DE 1995-19548344	19951222

AB Pigment dispersions, especially in the oil phase of ***cosmetic*** compns., are stabilized by use of polyol poly-12-hydroxystearates, especially polyglycerin poly-12-hydroxystearate (Dehymuls PGPH), as dispersing agents. Thus, 10 g D&C Red Number 30 was dispersed in 90 g Dehymuls PGPH, and 1 g of the mixture was then dispersed in 99 g cetearyl isononanoate (Cetiol SN). No sedimentation of the pigment was observed after 24 h.

L68 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:119147 CAPLUS Full-text
DOCUMENT NUMBER: 126:135456
TITLE: Oily ***cosmetic*** compositions containing lower alcohols
INVENTOR(S): ***Ansmann, Achim***; Kawa, Rolf
PATENT ASSIGNEE(S): Henkel Kgaa, Germany
SOURCE: Ger. Offen., 3 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19525109	A1	19970116	DE 1995-19525109	19950710
DE 19525109	C2	19980416		
PRIORITY APPLN. INFO.:			DE 1995-19525109	19950710

AB The greasy feel of oily skin lubricants, containing fatty alcs., fatty esters, plant oils, etc., is diminished by inclusion of 5-25% EtOH and/or iso-PrOH. Thus, a composition containing Cetiol PGL 90 and EtOH 10 weight% conferred a fresh, light feel on the skin.

L68 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:455712 CAPLUS Full-text
DOCUMENT NUMBER: 119:55712
TITLE: Preservative-free water-in-oil emulsions
INVENTOR(S): Kawa, Rolf; ***Ansmann, Achim***; Koerner-Hirtz, Jana
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4122033	A1	19930107	DE 1991-4122033	19910703

WO 9300880 A1 19930121 WO 1992-EP1423 19920624
W: JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE
PRIORITY APPLN. INFO.: DE 1991-4122033 A 19910703

AB Preservative-free water-in-oil emulsions for use in ***cosmetics*** and pharmaceuticals, which inhibit the growth of bacteria and fungi, contain ≥1 water-insol. oil 10-40, ≥1 water-in-oil emulsifier 2-10, ≥1 C2-12 polyol with 2-8 OH groups and ≤2 aldehyde or ketone groups 15-30, H2O 10-55, and water- or oil-soluble adjuvants 0-30 weight%. Thus, a night cream contained Dow Corning 344 10.0, Cetiol S 10.0, Lanette O 1.0, beeswax 8100 3.0, Monomuls 90-018 2.0, Lameform TGI 4.0, 99% glycerin 25.0, MgSO4.7H2O 1.0, and water to 100 weight%. After seeding 10 g of the cream with 9.0 + 108 bacteria and 7.5 + 107 fungi, the bacterial and fungal counts decreased to <10 and 4.0 + 104 after 14 days at 20°.

SEARCH HISTORY:

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=> d his nofile

     (FILE 'HOME' ENTERED AT 14:31:43 ON 05 JUN 2007)

     FILE 'REGISTRY' ENTERED AT 14:31:54 ON 05 JUN 2007
                D SAVE
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L1              STR
L2  (      16283)SEA SSS FUL L1
L3              STR
L4           327 SEA SUB=L2 SSS FUL L3
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                ACT SHOB1AND2/A
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L*** DEL        STR
L***(DEL   16283)SEA FILE=REGISTRY SSS FUL L***
L*** DEL        STR
L***(DEL     327)SEA FILE=REGISTRY SUB=L*** SSS FUL L***
L*** DEL     202 SEA FILE=REGISTRY ABB=ON  PLU=ON  L*** AND NC=1
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                ACT SHOBNOTDON/Q
               ---------
L5              STR
               ---------
L6              STR L5
L7            0 SEA SSS SAM L6
L8            0 SEA SUB=L4 SSS SAM L6
L9            0 SEA SUB=L4 SSS FUL L6
                D QUE
                D QUE L4
                D QUE L2
                D QUE L4
                D QUE L1
                DIS
                D QUE L1
L10          50 SEA SSS SAM L1
L11       16283 SEA SSS FUL L1
                D L6
L12           1 SEA SUB=L11 SSS SAM L6
                D SCA
L13             STR L6
L14           1 SEA SUB=L11 SSS SAM L13
                D SCA
L15          34 SEA SUB=L11 SSS FUL L13
                D SCA
L16           2 SEA ABB=ON  PLU=ON  L15 AND IDS/CI
                D SCA
L17           1 SEA ABB=ON  PLU=ON  L16 AND C16H30/MF
L18           1 SEA ABB=ON  PLU=ON  L17 AND L15
L19         202 SEA ABB=ON  PLU=ON  L4 AND NC=1
L20         203 SEA ABB=ON  PLU=ON  L18 OR L19
L21             STR
L22           5 SEA SUB=L20 SSS SAM L21
L23         169 SEA SUB=L20 SSS FUL L21
L24          34 SEA ABB=ON  PLU=ON  L20 NOT L23
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     FILE 'CAPLUS' ENTERED AT 14:51:58 ON 05 JUN 2007

     FILE 'HCAPLUS' ENTERED AT 14:52:01 ON 05 JUN 2007
L25          512 SEA ABB=ON  PLU=ON  L23
L26            0 SEA ABB=ON  PLU=ON  L23(L)COS/RL
L27            1 SEA ABB=ON  PLU=ON  US2003-719588/APPS
                 SEL RN

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L28            3 SEA ABB=ON  PLU=ON  (112-72-1/BI OR 556-67-2/BI OR 92-51-3/BI)

                 D SCA

     FILE 'HCAPLUS' ENTERED AT 14:54:03 ON 05 JUN 2007
                 D SCA L27
                 E COSMETICS+ALL/CT
L29        82580 SEA ABB=ON  PLU=ON  COSMETICS+PFT,NT/CT
                 E EMULSIONS+ALL/CT
L30        52891 SEA ABB=ON  PLU=ON  EMULSIONS+PFT,NT/CT
L31       390542 SEA ABB=ON  PLU=ON  (L29 OR L30) OR COSMET? OR EMULS?
L32            0 SEA ABB=ON  PLU=ON  L31 AND L25
L33           62 SEA ABB=ON  PLU=ON  L11 AND L31
L34           29 SEA ABB=ON  PLU=ON  L11 AND (L29 OR L30)
L35           17 SEA ABB=ON  PLU=ON  L11 AND L29
                 D SC
                 E EMOLLIENTS/CT
                 E E3+ALL
L36         2861 SEA ABB=ON  PLU=ON  EMOLLIEN?
L37            0 SEA ABB=ON  PLU=ON  L36 AND L25
                 S L11 AND C16H30/MF

     FILE 'REGISTRY' ENTERED AT 14:59:12 ON 05 JUN 2007
L38          405 SEA ABB=ON  PLU=ON  C16H30/MF

     FILE 'HCAPLUS' ENTERED AT 14:59:12 ON 05 JUN 2007
L39          704 SEA ABB=ON  PLU=ON  L38
L40           73 SEA ABB=ON  PLU=ON  L11 AND L39

     FILE 'REGISTRY' ENTERED AT 14:59:20 ON 05 JUN 2007
L41           30 SEA ABB=ON  PLU=ON  L11 AND C16H30/MF
L42           10 SEA ABB=ON  PLU=ON  L41 AND 2 C5/ES
                 D SCA
                 D QUE
L43           36 SEA ABB=ON  PLU=ON  2 C6/ES AND C18H34/MF
                 D SCA

     FILE 'BEILSTEIN' ENTERED AT 15:04:03 ON 05 JUN 2007
L44              STR
L45            0 SEA SSS SAM L44
L46            0 SEA SSS FUL L44

     FILE 'MARPAT' ENTERED AT 15:08:29 ON 05 JUN 2007
L47            0 SEA SSS SAM L44
L48           12 SEA SSS FUL L44
L49              STR L44
                 D QUE L49
L50              STR L44
L51            1 SEA SUB=L48 SSS SAM L50
                 D SCA
                 D SCA L48
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L52           0 SEA ABB=ON  PLU=ON  L48 AND NEMATIC?/TI

     FILE 'CAPLUS' ENTERED AT 15:16:35 ON 05 JUN 2007
L53           1 SEA ABB=ON  PLU=ON  L48 AND NEMATIC?/TI

     FILE 'HCAPLUS' ENTERED AT 15:17:33 ON 05 JUN 2007
                D L35 HITSTR
                D QUE L23
L54         422 SEA ABB=ON  PLU=ON  L25 AND (PY<2003 OR PRY<2003 OR AY<2003)
L55             ANALYZE PLU=ON  L54 1-422 RN :   13094 TERMS
                D

     FILE 'REGISTRY' ENTERED AT 15:19:52 ON 05 JUN 2007
L56         168 SEA ABB=ON  PLU=ON  L23 NOT 96624-52-1/RN
L57           1 SEA ABB=ON  PLU=ON  L23 NOT L56
                D SCA

     FILE 'HCAPLUS' ENTERED AT 15:20:37 ON 05 JUN 2007
L58         365 SEA ABB=ON  PLU=ON  L56
L59         287 SEA ABB=ON  PLU=ON  L58 AND (PY<2003 OR PRY<2003 OR AY<2003)

     FILE 'CAPLUS' ENTERED AT 15:21:50 ON 05 JUN 2007
                D QUE L54

     FILE 'HCAPLUS' ENTERED AT 15:21:58 ON 05 JUN 2007
                D QUE L54
                D L54 IBIB AB HITSTR 1-3 100-105 200-205 410-422

     FILE 'MARPAT' ENTERED AT 15:22:55 ON 05 JUN 2007
                D QUE L53
L60           1 SEA ABB=ON  PLU=ON  L53 AND L48
                D L60 IBIB ABS QHIT TOT

     FILE 'CAPLUS' ENTERED AT 15:24:11 ON 05 JUN 2007
L61         290 SEA ABB=ON  PLU=ON  ANSMANN A?/AU
L62          33 SEA ABB=ON  PLU=ON  BOTH S?/AU
L63          53 SEA ABB=ON  PLU=ON  PRINZ D?/AU
L64           1 SEA ABB=ON  PLU=ON  SCHOEFFLER N?/AU
L65          92 SEA ABB=ON  PLU=ON  WESTFECHTEL A?/AU
L66         162 SEA ABB=ON  PLU=ON  (L61 OR L62 OR L63 OR L64 OR L65) AND
                COSMET?
L67           0 SEA ABB=ON  PLU=ON  L66 AND BICYCLO?

     FILE 'HCAPLUS' ENTERED AT 15:26:06 ON 05 JUN 2007
                D SCA TI L27

     FILE 'CAPLUS' ENTERED AT 15:26:06 ON 05 JUN 2007
L68          19 SEA ABB=ON  PLU=ON  L66 AND CYCLO?
                D L68 IBIB ABS TOT
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